DOCUMENT RESUME

ED 069 910 VT 017 742

AUTHOR	Palomba, Neil A., Ed.; Jakubauskas, Edward B., Ed.
TITLE	Manpower Research in the 1970's.
SPONS AGENCY	Iowa State Univ. of Science and Technology, Ames. Industrial Relations Center.; Manpower Administration (DOL), Washington, D.C.
PUB DATE	71
NOTE	243p.; Proceedings of the Annual Summer Manpower Research Institute (4th Ames, Iowa, 1971)
EDRS PRICE	MF-$0.65 HC-$9.87
DESCRIPTORS	Economic Research; Goal Orientation; Interagency Coordination; *Interdisciplinary Approach; Management Development; *Manpower Development; Manpower Needs; *Manpower Utilization; *Research Needs; *Research Opportunities; Research Utilization; Social Responsibility; Speeches; Summer Institutes; Vocational Development
IDENTIFIERS	*Future; Great Plains States Region

ABSTRACT

Manpower research needs for the 1970's and the development and purpose of manpower research centers were the themes of a 1-week summer Manpower Research Institute held at Ames, Iowa in 1970. Sponsored by the Industrial Relations Center and funded by the U.S. Department of Labor's Manpower Institutional Grant Program, this interdisciplinary examination of manpower problems by 20 participants was intended to contribute to the effectiveness of social science instruction, promote manpower research at colleges and universities in the Great Plains States Region, and encourage application of research findings to manpower problems. Topics discussed in the 11 papers include: (1) manpower statistics and government research, (2) present and future trends affecting manpower development, (3) the nature of a longitudinal research project at Ohio State University, (4) a project examining management performance and development, (5) changes needed in the Social Science Research Centers, (6) interagency coordination needs, (7) the college community relationship, (8) ideas for management training derived from an international cross-cultural study, (9) priority areas for manpower research, and (10) responsibilities of an urban university towards its disadvantaged communities. (AG)

ED 064710

U.S. DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
OFFICE OF EDUCATION
THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL OFFICE OF EDUCATION POSITION OR POLICY

MANPOWER RESEARCH IN THE 1970'S

Proceedings of the Fourth Annual

Summer Manpower Research Institute

Neil A. Palomba
Edward B. Jakubauskas
Editors

Industrial Relations Center
Iowa State University
Ames, Iowa
1971

VT017742

Preface

The chapters in this publication developed out of a one-week Summer Manpower Research Institute held at Ames, Iowa, from June 8-12, 1970. This Institute was sponsored by the Industrial Relations Center through contract funds received from the U.S. Department of Labor's Manpower Institutional Grant Program.

Participants and speakers at the Institute spent five days exploring manpower research needs of the 1970's and the appropriate response of research centers and concerned social science scholars. This, and the previous three institutes, were conceived to fulfill three general goals:

1. To bring together established as well as promising scholars in the social sciences to promote better quality manpower research at colleges and universities in the Great Plains States Region.

2. To promote the application of research findings to problem areas in the field of manpower.

3. To contribute to the effectiveness of social science instruction in colleges and universities through an interdisciplinary examination of manpower problems.

Among the speakers at the Fourth Institute were government researchers, university professors, and a college president. All had considerable

experience not only as research scholars, but also as consultants and program administrators. Twenty participants represented 12 colleges and universities from 8 states. Disciplines included in the Institute represented a broad range of research areas from economics, psychology, sociology, industrial engineering, political science, education, and business administration.

The specific theme of this year's Institute was twofold: (1) An exploration of the nature of (and need for) manpower research in the 1970's; and (2) the development and purpose of manpower research centers. Exploration of research activities in the 1970's was discussed by government and university research scholars while the application of research findings to society's manpower problems was explored by a college president and an engineer working closely with business and government decisionmakers. Three manpower research centers were represented as models for research and community service. On the last day of the Institute the experiences of a center involved in the development of service managerial talent on a worldwide basis was presented as an example of research and administration in a cross-cultural context.

Neil A. Palomba
Edward B. Jakubauskas

Table of Contents

Preface i

Chapter 1. Manpower Research and Research Centers in the 1970's: An Overview
Neil A. Palomba and Edward B. Jakubauskas 1

Chapter 2. BLS Research Programs in the 1970's
Gene Farnsworth 6

Chapter 3. Manpower Statistics and Analysis in the Bureau of Labor Statistics
Joseph W. Hines 20

Chapter 4. Manpower Research Needs of the 1970's
Garth Mangum 30

Chapter 5. Research as a Force for Change Among the Urban Poor
Harland Randolph 49

Chapter 6. The Development of Manpower and Human Resource Programs in Colleges and Universities
J. Earl Williams 61

Chapter 7. Longitudinal Studies of Labor Market Behavior
Herbert S. Parnes 116

Chapter 8. Studying the Evolution of Performance
Arthur C. MacKinney 136

Chapter 9. Social Science Research Centers in the 1970's: the Need for Relevance in Manpower and Industrial Relations Research
Herbert G. Heneman 153

Chapter 10. Emerging Need for Interagency Coordination and Development Personnel in the Manpower Field
George M. Beal 172

Chapter 11. The Role of the University as a Resource in Promoting Community and Economic Development
Waldo Wegner 192

Chapter 12. Cross Cultural Research in Management Studies
Bernard M. Bass 204

Chapter 1

Manpower Research and Research Centers in the 1970's: An Overview

Neil A. Palomba and Edward B. Jakubauskas

The papers in this volume discuss manpower research and research centers in the 1970's. The various authors look at their topics from the viewpoints of economics, psychology, and sociology. It is hoped that this publication will help foster a true interdisciplinary approach to studying and solving our current and future manpower problems.

In the first paper Mr. Gene Farnsworth looks at the current Bureau of Labor Statistics' research programs. These include union wages and hours, area wage surveys, industry wage surveys, professional administrative technical salaries, wholesale price index, industry-sector price indexes,

---

At the time of the Institute Neil A. Palomba was Associate Professor of Economics at Iowa State University and Edward B. Jakubauskas was Professor of Economics and Director of the Industrial Relations Center at Iowa State University.

At the present time Neil A. Palomba is the Associate Professor of Economics at West Virginia University and Edward B. Jakubauskas is Dean of the College of Commerce and Industry at the University of Wyoming.

consumer expenditure survey, consumer price index, city worker's family budget, and employment data. Mr. Farnsworth also indicates the specific areas in which new research in the 1970's will probably be done. These areas include a general wage index, a comprehensive monthly general price index, and occupational employment statistics.

Mr. Joseph Hines authored Chapter 3 and focuses directly on manpower statistics and research. He discusses the industry-occupational matrix data that the Bureau of Labor Statistics has developed to analyze occupational trends, and he briefly outlines the development of manpower information by the Bureau of Labor Statistics during the post-World War II period. Mr. Hines concludes by discussing the demands for local data, and the need to develop micro data systems.

Dr. Garth Mangum wrote Chapter 4, and he identifies five top priority areas for future manpower research. He feels the most critical emphasis of the 1970's is the problem of the trade-off between unemployment and inflation. Unless the United States can continue to have a tight labor market, he feels we will not do very much for the disadvantaged. Dr. Mangum's second priority area is the need to know a lot more about the basic process of how to prepare people for jobs. His third priority area is the need to explore the implications of the growth of low productivity-low wage occupations. His fourth priority area is the need to study how the manpower system works so that we can identify the pathologies and reduce them. Finally, Dr. Mangum feels we should study the question of the meaning of work in peoples' lives.

In Chapter 5 Dr. Harland Randolph discusses how an urban university might be responsive to clients who are presently not a part of the system

in the sense that they do not receive direct benefits from the system. Dr. Randolph argues that it is an essential assumption that the manpower researcher cannot approach the community of the urban poor on the premise that employment is ipso facto a valuable style of life. He also deals with a second premise--the premise that it is equality of results, not equality of opportunity, that counts.

Chapter 6, written by Dr. J. Earl Williams, deals with three major trends that contributed most to the development of manpower and human resource programs in colleges and universities. These include the growth of industrial relations centers, the manpower institutional research grant program of the United States Department of Labor, and the social responsibility of the university. The author discusses in detail the first seven universities which received a Manpower Research Institutional Grant. He looks at the experience of the Center for Human Resources at the University of Houston and relates it to that of other emerging interdisciplinary centers.

Dr. Herbert Parnes authored Chapter 7; and he discusses the nature of his longitudinal research project at Ohio State University, explores some of the methodological problems of such research, and illustrates some of the preliminary findings. The research is concerned with the determinates of such aspects of pre-labor market and labor market experiences as educational achievement, occupational aspirations, labor force participation, and mobility. It emphasizes the importance of an interdisciplinary framework to really explore fully the sources of variation in labor market behavior. Dr. Parnes concludes by looking at some of the intercolor differences found so far in order to illustrate the research questions raised.

Chapter 8 was written by Dr. Arthur MacKinney; and he discusses a project which is concerned broadly with manager performance, manager development, and the evolution of management performance. He feels that we don't really understand our dependent variables in applied behavioral science to the effect that we have some severe constraints on our ability to generalize in science. Dr. MacKinney also feels that the specification of time and order is important in determining causation.

Dr. Herbert Heneman looks at the gap between the manpower and industrial relations researcher and the practitioner in Chapter 9. He argues that our social science and industrial relations research centers lack relevance to the practitioner, and that this lack of relevance stems from a lack of a sense of urgency. He discusses a Graduate School of Applied Behavioral Science as a possible solution to this problem, and he feels that such a school must emphasize both macro and micro research. Dr. Heneman concludes by stating that we need more urgency, more relevance, more micro, and more client centered approaches in the Social Science Research Centers of the 1970's.

In Chapter 10 Dr. George Beal provides a brief analysis of the social context out of which the specific manpower need for interagency coordination and development personnel arises. He attempts to briefly specify the particular role requirements of this manpower category, and he suggests the type of training needed for the role incumbants in this manpower category. In his general training guidelines Dr. Beal sees several disciplines providing the main training inputs including psychology, social psychology, sociology, political science, economics, communications, philosophy, and selected aspects of history and law.

Mr. Waldo Wegner authored Chapter 11, and he indicates the many resources available in universities if people are knowledgeable about the availability of these resources. He looks at his topic in two ways: (1) what individual talents are required in order that a community may properly develop, and (2) how best can the college or university communicate the needed information to members of the community? Mr. Wegner discusses the operation of the Center for Industrial Research and Service at Iowa State.

The final chapter in this volume is written by Dr. Bernard Bass. He discusses a network of research and training groups established to promote management education, to innovate new training approaches, and to carry out research in cultures throughout the world on management behavior. Dr. Bass looks at the research data and discusses some behavior which seems universal (the same in six or seven countries), some which seems culturally bound, and some which is economically bound. He sees this network of research and training groups as a good opportunity to test many cross-cultural hypotheses.

Chapter 2

BLS Research Programs in the 1970's

Gene Farnsworth

At the same time social scientists demonstrate need for more and more statistics, others in our population express apprehension and concern over what they see as a profusion of numbers already being produced. Also our accomplishments in the social sciences have been made to appear small in relation to the magnificent advancements of the physical scientists. So many of my friends are physical scientists--and I've heard them refer to us as disadvantaged and then underdeveloped. Perhaps there is some consolation that they now call us emerging.

I have used, defensively, a statement that we all know so well, but our contemporaries in the hard sciences don't think about. "Scientifically acceptable means of proof and discovery, open to the hard sciences, are not open to us." We do not often make discoveries by accident, or by trial and error.

Gene Farnsworth, Bureau of Labor Statistics, Kansas City, Missouri.

An examination of the BLS in the 1970's obviously requires a look at where we are now as well as where we may go. In consideration of the interdisciplinary approach of this Institute, I wanted to express our mission in such a way that my proficiency in interdisciplinary thought processes would be evident. After great deliberation I realized my goal--in the millenium of Aquarius, if the moon is in the second house, where is BLS?

Obviously we are not going to cover all Bureau programs. We have grouped them into major areas--wages, prices, employment, and manpower research.

WAGES - FOUR BASIC SURVEYS

1. Union wages and hours

Annual studies of union wage scales are conducted in four industries--building construction, local transit, local trucking, and printing. Occupational pay rates are provided for almost 70 cities having a population of 100,000 or more and relate to July 1st of the year. They represent the wages agreed upon through collective bargaining between employers or their association and individual unions or joint labor counsels.

Quarterly rates for the seven major building trades are issued for about 100 cities.

Although they differ in coverage, the following three types of occupational wage surveys form an integrated program providing information on straight-time earnings or "pay-rates." The job descriptions used are designed to identify the essential elements of skill and responsibility that establish the basic concept of the job.

2. Area wage surveys

Many of you are familiar with BLS area wage surveys. These are cross-industry surveys conducted annually in almost 90 SMSA's. The occupations studied are common to a variety of industries and may be classified broadly as office clerical, technical, skilled maintenance, and custodial and material movement jobs. The cross-industry nature eliminates production workers. The industry scope covers all manufacturing and large segments of nonmanufacturing. They exclude government, construction, and mining. Every two years an area study is expanded to yield data on supplementary practices such as shift operations and differentials, paid holidays and vacations, and insurance and pension benefits.

In the last couple of years we have been under contract to provide similar area wage studies for use by the Department of Labor in making wage determinations in connection with the Service Contracts Act of 1965. These number about 80 and are providing data for areas not included in our SMSA wage survey sample.

3. Industry wage surveys

Approximately 50 manufacturing and 20 nonmanufacturing industries are surveyed on a cyclical basis; most every 5 years, many at 3 year intervals. Nearly all are studied on a nationwide basis. Where possible, estimates are provided for regions and major areas of concentration.

The occupations studied are those common to the specific industry and, of course, include production workers. Consideration is also given to the numerical importance of the occupation and its value as a reference point in collective bargaining and, as always, our ability to clearly define duties so our field agents can make clean job matches.

4. Professional administrative technical salaries

This national survey provides broadly based information on salary levels and distributions in private employment. Basic fields studied are: accounting and auditing, legal, personnel, engineering and chemistry, technicians, and clerical. The many occupational definitions provide for classification according to work or responsibility levels. And so, if my memory is correct, we have eight levels of engineers and chemists, four chief accountants, six attorneys and so forth.

Those of you familiar with federal employment realize that results of this survey provide for comparison of federal salaries with private industry. And it was that need which fostered the first of these studies in the early 60's. I am not certain now who uses it the most. It is the single most widely distributed wage survey we conduct. And, with the possible exception of the Occupational Outlook Handbook, we sell more copies of PAT bulletins than any other BLS publication.

Wages - The following were discussed as expected areas of expansion.

1. A data yield that will provide area figures on state and local government pay rates (a certainty).
2. Local figures on occupations currently included in the national PAT survey (except local coverage to be limited to very large areas only).
3. Special studies providing annual earnings for occupations--particularly in construction.
4. General wage index (high priority).

PRICES

WPI - Wholesale Price Index

The WPI represents the oldest continuous statistical series published by the Bureau. It provides from 1800's forward a measure of price changes for goods sold in primary markets. The roughly 2500 commodities included are classified following commodity lines grouped by similarity end-use or material composition. The prices reported are from the items' initial point of sale and are intended to represent transaction prices. In addition to the 2500 items, indexes are provided for 37 subproduct classes, 314 product classes, 90 subgroups, and 15 major groups. Then there are 25-30 special group indexes, most of which consist of rearrangements of data into different combinations of price series. These monthly figures are widely used and for many purposes: market analysis, contractual escalators, account deflators, budget making and planning. I mentioned the large number of indexes available because of their frequent use. On the other hand, a survey in 1961 revealed that more than half of the users of the WPI relate to the All Commodities index as a general economic indicator.

Industry-Sector Price Indexes

As a result of the need for measures of industrial prices in addition to the market oriented WPI, the Bureau has initiated a program of industry-sector price indexes. These are essentially composite indexes made up of price series that match the economic activity of a defined industry or economic sector. Conceptually they could be based on sales or purchases. At this point we are limited to WPI price data so our work is being directed first toward two sets of output indexes. One is based on gross industry

shipments, the other gross product shipments. These have particular relevance to analytical studies where the emphasis is on industrial as distinct from market or commodity-use classification.

Now I want to move from the area of price where there are few experts to one where everyone is expert.

CES - Consumer Expenditure Survey

The most recent relate to 1960-61. These are specialized family living studies primarily emphasizing family expenditures for goods and services used in day to day living. The survey was designed to obtain the most accurate information possible about family spending patterns in detail.

The primary objective was in up-dating the expenditure weight base for the CPI.

The completed study provides national and regional statistics for urban, rural nonfarm, and rural farm areas. Separate reports were issued for each of 72 urban areas surveyed. All metropolitan areas with a 1960 population of 1,000,000 or more were included as "certainty" cities.

All the Bureau uses in revising the CPI are data from urban families, but the coverage of the CES was broadened in order to provide information on a complete cross section of families in the three segments of the population--urban, rural nonfarm, and rural farm. Extensive assistance was provided by the Department of Agriculture. Final tabulations served many objectives and provided a basis for many private and public analyses of spending patterns and marketing and consumption economics research.

The basic reports presented averages for major components of family accounts classified by nine economic and demographic characteristics--

income, family size, age of head, occupation, renter or homeowner, education of head, race, family type, and number of full-time earners. Supplement reports provided cross-classification data.

The complexities of this study certainly don't lend themselves to a brief description, but the study itself lays the foundation for the next area.

CPI - Consumer Price Index

This is probably the best known of our products and possibly the most misused. Despite the many changes and improvements in procedures since its inception in 1913, the CPI continues to be what it has always been--a measure of price change, and price change only, in items purchased by urban wage and clerical workers for their own consumption. The purpose is still to measure shifts in the purchasing power of the consumer dollar.

The most common misconceptions approach legendary proportions--a measure of changes in our total cost of living--a means of determining inter-city differences in living costs.

The CPI is computed by comparing, at different periods, costs of a fixed set of goods and services--the market basket. Technically, it is a price index with "fixed" or "constant" weights. The market basket of items priced has significance only as a sample of all consumer expenditures; nothing more. When segments cease to be representative, they may be changed. In addition to the expenditure-weight base provided by CES's, the CPI is expressed in terms of a time-reference base. Currently this is 1957-59 = 100. As most of you are aware, this will change in January 1971 to 1967 = 100 to comply with BOB instructions.

The national index (U.S. city average) includes prices from 5 SMSA's, with monthly indexes of their own, 18 more for which indexes are issued monthly for Food and 4 times a year for All Items; and 33 more urban areas for which no indexes are tabulated.

As a regional resource person, employed by BLS, I am sensitive to the many requests for more local indexes. At the same time I am acutely aware that in most cases these requests represent an extension of the misuses of the CPI as opposed to a real need. What is desired usually is the ability to compare living costs in city A to city B.

CWFB - City Worker's Family Budget

Questions of inter-city living cost comparisons are answered with these studies. The newest BLS budgets provide a measure of identifying family living costs at three different levels in 39 different metropolitan areas.

Since costs vary with family characteristics, all normative estimates must be based on specific family situations. The "family of four" whose requirements were assessed to develop estimates includes a husband, age 38, employed full time, a wife who does not work outside the home, and two children, a girl 8 and a boy 13.

All three budgets provide for the maintenance of health and social well-being, the nurture of children, and participation in community activities.

As consumers, we usually think of a budget as a division of income. We start with an amount of money and divy it up to cover expenditures. Perhaps it could be called the hypothetical approach, but in the clinical

laboratory of the Bureau's inner-sanctum, the synthetic approach is required.

A set of assumptions must be stated which relate to characteristics of the family, their manner of living, locality, and relative position of the living standard on the consumption scale. Then cost estimates are developed by translating the generalized concept into a list of the kinds, qualities, and amounts of commodities and services essential to maintaining the living standard--and the list priced.

In theory the list is based wholly on objective judgements. [Two kinds of data were used. Scientific standards exist and were used for the food-at-home and housing components. For categories where scientific standards have not been formulated, we used an elasticity technique. Purchases were examined to determine the income level at which the rate of increase in quantity purchased began to decline in relation to the rate of change in income, i.e., the point of maximum elasticity or the inflection point.]

In addition to the "four person" bueget, three levels are also provided for a "retired couple." Spring 1967 figures are in bulletin form. Spring 1969 estimates are already out for both the family and the retired couple and bulletins should be available soon.

Although their primary use is in evaluating income adequacy or ability to pay, the fact that they measure place-to-place living cost differences insures their popularity.

Prices - Discussed as future intelligence

1. CPI revision, already begun, will include a CES in 1972-73. New data processing and tabulating techniques will improve information output.

2. Annual consumer expenditure data (a possibility).
3. Cost-of-living oriented index. National figure annually--expected mid-decade.
4. Consumer-oriented local information:
   a) Costs of Housing, own or rent
   b) Costs of Auto, ownership
   c) Work-related expenses for the working wife
   d) Work-related expenses for the one parent family
   e) Cost differentials for different sizes and qualities of the same item (certainty).
5. Comprehensive monthly general price index (high priority).

EMPLOYMENT

Employment, establishment data is drawn from payroll reports compiled each month from mail questionnaires by BLS, in cooperation with State agencies. The survey provides current estimates of nonagriculture wage and salary employment; in total, production or nonsupervisory workers, and women. In addition, series are included on production or nonsupervisory workers' average hourly earnings, average weekly earnings, average weekly hours, and average weekly overtime hours. The last is limited to manufacturing industries. Considerable industry detail classified by SIC code is published monthly for the Nation.

Employment data for total nonagriculture and the major industry divisions plus hours and earnings for all manufacturing are published for each state and the majority of SMSA's. The individual state publications provide full available detail relating to their state and areas within.

In this program the workweek information, AWH's, relates to hours paid for rather than actual hours worked, and so they reflect factors such as absenteeism, turnover, and strikes.

The average weekly earnings are "gross earnings", and although they do not include "noncash" benefits, they do include the effect of paid holidays and vacations, premium pay for overtime and shift differentials.

Although the focus of the establishment survey is on jobs--filled jobs--a new developing study shifts the emphasis somewhat. The information is still provided by employers, but the survey provides insight into unfilled jobs. It is the Job Opportunities and Labor Turnover Statistics program. You can imagine what we do with that: JOLTS.

Most of you have seen turnover statistics. Those identify numbers of separations, quits and lay offs; and numbers of accessions, including recalls and transfers as well as new hires. Up to now they have been limited to manufacturing industries. The new program will expand coverage to all nonagriculture industries in 26 metropolitan areas. In addition, industry data on job openings will be published monthly. Job openings, by occupation, are to be issued quarterly in 17 of these 26 cities. In an additional 25 cities, JOLTS in manufacturing and mining are to be issued monthly.

It is probably not necessary to say much about the potential value of these data. The need has been expressed by many; the lack of such information identified as one of the more conspicuous gaps in our labor force intelligence.

Establishment survey data, because they are compiled from pay and personnel records, are limited to nonagriculture industry. In addition to excluding agricultural workers, they provide no figures on the self-employed,

unpaid family workers, and domestic workers.

Nevertheless, they tell us a great deal about the demand side of the world of work by looking at workers at their place of employment.

To provide data on the supply we must shift perspective to look at workers--themselves. This requires approaching people where they live--the population survey.

Monthly Labor Force Report - Household data

It is from this survey that we obtain the national monthly unemployment rate which is so widely publicized, closely watched, and commonly misunderstood.

The detailed statistics, which are derived from the Census Bureau's monthly CPS (current population survey), feature information on employment and unemployment, classified by a variety of demographic, social, and economic characteristics. Essentially the study identifies the labor force status of the population. I'm certain all of you are aware of the quantity of national figures provided and also conscious that they are "national."

The concepts of the study have been around a while. They have been tossed around and on occasion kicked around, but no substantial alterations have transpired. The classification of an individual on the basis of his actual activity within a designated calendar week is the basic principle. Since multiple situations exist--one could be employed but in addition looking for another job--a system of priorities is essential. Consistent with our work ethic "working" is assigned the highest priority. To be classified as unemployed an individual must not have worked at all. In addition, there must be evidence of work-seeking activity and the individual must have been

available for work.

In the scope of history this whole survey would be of relatively recent vintage. There has been a tremendous elaboration in detail provided in the last decade. Currently a considerable amount of information is obtained about persons employed, unemployed, and those not participating in the labor force. Obviously any serious analysis requires the detail.

The sample is still not large enough to provide monthly figures for geographic breakdowns. However, it is possible to accumulate the sample data and to develop estimates for some of the population characteristics in large geographic areas. Quarterly information on the employment situation in urban poverty neighborhoods of the nation's 100 largest cities is now issued. Figures relate to the aggregate of poverty neighborhoods.

On an annual basis, it has been possible to develop labor force information relating to 8 regions, the 10 largest states, and the 20 largest SMSA's. For 14 of the 20 SMSA's figures can be broken out on the central city as well.

Those of you familiar with series usually referred to as Special Labor Force Reports will also recognize that there are expansions to the normal monthly survey. Special inquiries into aspects of the employment situation are incorporated, some on a regularly scheduled annual basis. The May survey examines "multiple job-holders;" October, "employment of school-age youth;" and in March, "educational attainment of workers." You may be familiar with these as well as the annual "work experience of the population" and "marital and family characteristics of workers," and a variety of other studies in depth.

Employment - Discussed as: "To Come"

1. An evaluation of the household survey sample will be provided by the 1970 Census.
2. Utilizing the special labor force report approach studies will provide needed additional insight into job and income related problems of minority groups.
3. An expansion of the establishment survey to provide statistics on SMSA's currently not available.
4. Occupational employment statistics (very high priority).

Chapter 3

Manpower Statistics and Analysis in the Bureau of Labor Statistics

Joseph W. Hines

Gene Farnsworth has covered very ably the principal surveys of the Bureau of Labor Statistics and future plans for them. Since the central theme of this institute is manpower research, I will continue this discussion by focusing directly on manpower statistics and research.

It seems to me that two factors have predominantly influenced the development of manpower information. One influence has been that the BLS has responded to the concerns of the times--as it must and as it should--in developing statistical surveys and analyses. I want to expand on this a little later on. The other factor is that the development of manpower information has been influenced by the direction of the development of economic thought. The economic concepts of Keynesian and neo-Keynesian

---

Joseph W. Hines is the Assistant Regional Director of the Bureau of Labor Statistics in Kansas City, Missouri.

thought relate more directly to measurable aspects of the economy than the more abstract concepts of neo-classical and earlier thought. Alfred Marshall is reported to have characterized the general equilibrium equations of Leon Walras as "empty boxes." For the most part, the Keynesian and neo-Keynesian models are not empty boxes--they can be filled with data from the real world.

Because modern economists have developed analytical mechanisms that link theory and data, it has been possible to apply economic theory to practical affairs. This has enlarged the role of national economic policy in attempting to moderate the business cycle and promote full employment. These developments have created a demand for data needed for the analytical frameworks used in economic policy formulation.

Within the context of these two influences, i.e., the concerns of the times and contemporary economic concepts and models, I would like to briefly outline the development of manpower information by the Bureau of Labor Statistics during the post-World War II period. You will recall that the decade of the 1930's was a depressed period when unemployment was relatively high. There was a great deal of concern about unemployment and about the situation of the unemployed. However, there wasn't much hard statistical information available. In the early and middle portions of the decade, there were a number of attempts to measure the number of unemployed--which produced widely varying results. Toward the end of the decade, the Works Progress Administration began to experiment with a household survey. This experimental work led to the labor force survey. A regular monthly labor force survey was inaugurated in April of 1940.

The World War II years brought full employment of all resources, but

many people feared that the ending of the war would result in widespread unemployment again. There was a growing acceptance of the idea that the government should take responsibility for maintaining adequate employment opportunities. The Employment Act of 1946 made the maintenance of conditions that would promote full employment a responsibility of the government. The concern about employment in the immediate post-war period resulted in demand for more information on employment than was available from the national household survey and the national industry employment survey, which had been going on since 1909. Accordingly, in 1946 and 1947 the BLS entered into arrangements with a state agency in each state to produce cooperatively employment estimates by industry for states and major metropolitan areas on a monthly basis. This program was developed as a part of the industry employment survey.

As far back as the 1930's there was considerable interest in the need for better preparation and better career planning for young people. A President's Advisory Committee on Education was appointed. The Committee reported in 1938 and recommended the creation of an occupational outlook service in the Bureau of Labor Statistics to develop information to assist individuals in planning careers. This recommendation was implemented in 1941 when the Occupational Outlook Service was organized under a specific authorization by the Congress. At that time, very little research had been done in the occupational outlook field; and it was necessary to begin in a very basic way to develop information about occupational trends. This work was interrupted by World War II. The first product of the Occupational Outlook Service was a manual of occupational outlook information that was developed for the Veterans Administration in 1946. The first edition of the

Occupational Outlook Handbook was issued in 1949. Since then, the Handbook has been issued on a regular continuing basis--usually at two-year intervals--and has been widely adopted for use by school guidance counselors and others who assist young people in planning careers. The most recent edition covers more than 700 occupations.

The widespread unemployment feared in some quarters did not materialize at the end of World War II. The Korean conflict brought a new boom early in the 1950's. As this conflict drew to a close, there was again concern about the impact on employment and the outlook for returning workers. The Air Force financed a study by the BLS of the occupational composition of employment by industry. This was the first industry-occupational matrix. An industry-occupational matrix is simply a table in which industries are listed down the stub and occupations are listed across the heading. Where a row and a colum intersect, the number entered there is the number of persons employed in a particular occupation in a particular industry. Rows total to total employment by industry; columns total to total employment by occupation. An industry-occupational matrix has been maintained by the BLS since the middle 1950's and has been continually updated as new information becomes available. Projected matrices for future years have been developed as well. Only in the past couple of years, however, have we believed that sufficient information has been available and that the quality has been sufficiently good to warrant publishing the matrices. Matrices for 1960 and 1975 have been published. Matrices are available for 1965 and 1967. A matrix for 1980 will shortly be available. All of these matrices are available to researchers on tape. The industry-occupational matrices show detail for 116 industry sectors and 160 occupations. In the BLS, the

occupational-industry matrices have been used primarily in the occupational trend analysis that underlies the Occupational Outlook Handbook.

In the latter half of the 1950's, economic growth slowed and unemployment began to rise. The unemployment rate exceeded six percent by the early 1960's. This was the period of the great debate on the causes of unemployment between the structuralists and those who blamed insufficient aggregate demand. There was much popular as well as professional concern about the impact of automation and the role of technological advance in creating unemployment. A congressional committee under the chairmanship of Senator Joseph Clark held a series of landmark hearings on the Manpower Revolution. Dr. Garth Mangum was the committee's chief of staff. Testimony was taken from virtually every manpower expert in the country--and from some persons who probably were not experts. The testimony makes fascinating reading. One outgrowth of these hearings was the establishment in 1964 of a National Commission on Technology, Automation, and Economic Progress. Garth Mangum was the executive secretary of this commission. In the BLS, the concern in the last half of the 1950's and the first half of the 1960's about the impact of technology led to a substantial expansion in productivity research. Indexes of output per man hour were expanded and technically refined. Individual industry studies of the impact of technological change on employment were made for 40 industries.

The first BLS labor force projections were issued in 1955. They were ten-year projections to 1965 and forecast the composition of the labor force for the decade ahead. The first set of labor force projections was not widely noticed or used outside the BLS. A second set of ten-year projections to 1970 was issued in 1960. At that time, the Department of Labor issued a

publication presenting these projections and pointing up some of their implications. This publication was entitled The Manpower Challenge of the 1960's. It created widespread interest, and the 1970 projections came into widespread use. In 1965, a set of projections to 1975 were issued. We are now issuing the 1980 projections.

By the early 1960's, some concensus was beginning to arise out of the debate on the causes of unemployment between the structuralists and the advocates of economic expansion. There seemed to be general agreement that the unemployment was in part caused by demand deficiency and in part caused by structural problems, i.e., the mismatch between workers and jobs. One of the major contributions of the "new economics" was a full employment (later called high employment) growth model which estimated the economic growth that would be obtained in a full employment (or high employment, if you prefer) economy. Fiscal measures were recommended and, in time, implemented to spur economic growth. This interest in economic growth led to the formation of the economic growth model project. This project is chaired by a member of the Council of Economic Advisors. The principal members of the project are the Council, the Bureau of the Budget, the Department of Commerce, and the Bureau of Labor Statistics. The secretariat is in the Bureau of Labor Statistics.

The economic growth model is based on a combination of interindustry analysis and projections of labor force, productivity, and interindustry structure. In short, it is built upon the input-output table of the Office of Business Economics and the manpower projections of the Bureau of Labor Statistics. Projections of Gross National Product in constant dollars are made. Four sets of projections are made based on differing assumptions about

unemployment and the rate at which the economy is becoming increasingly service oriented. The real GNP projections are distributed among the major categories of final demand. The projections are further broken down into output by industry sector, and employment requirements to produce this output by industry sector are calculated. The original set of projections was for 1970 and was published in a bulletin entitled Projections 1970. The 1980 projections are now being released. The initial release was in an article in the April 1970 issue of the Monthly Labor Review. A bulletin presenting more detailed information is scheduled for release this summer.

Over the years, projection work has developed in the BLS in different sections and in response to different demands. The Occupational Outlook Service has long made occupational employment projections for individual industries and has projected an industry-occupational matrix as part of the analytical work underlying the Occupational Outlook Handbook. The labor-force-analysis people have independently developed and made labor force projections, and the economic growth model now provides a separate set of projections of output by industry sector and employment requirements by industry sector. For the first time, with the 1980 projections, all of these different sets of projections have been coordinated and made internally consistent. Hence, later this summer (1970) detailed labor force projections that are consistent with the economic growth model projections will be released. Also scheduled for release this summer are industry-employment projections to 1980 for over 250 industries and occupational employment projections.

The latest BLS project in the field of manpower projections has been the development of a methodology that can be used by researchers to make

state and area manpower projections that are consistent with the BLS national manpower projections. This project arose out of the demand for more information at the local level upon which to base vocational education planning. The suggested procedures along with data required by them, such as the industry-occupational matrices, have been issued in a four volume set of publications entitled Tomorrow's Manpower Needs. I would strongly recommend that anyone who is planning to prepare regional, state, or local manpower projections examine carefully the methodology and source materials in Tomorrow's Manpower Needs.

This concludes the brief review of the development of manpower information by the Bureau of Labor Statistics during the post-war years. As I remarked at the beginning of this paper, I think that a review of this type points up the influence of changing concerns about manpower problems and the influence of the analytical framework on the development of manpower information. I believe that future developments in manpower research are likely to be affected by the same factors. Now let's take a look at what lies ahead with respect to BLS manpower research and statistics.

It was about the middle of the 1960's when accelerated economic growth propelled employment and GNP to the high level employment target. The continuation of accelerated economic growth past this point resulted in inflation during the later part of the decade. The major economic concern then shifted from the problem of sluggish growth to the problem of economic stability. It appears that the problem of maintaining a high growth rate without inflation will be the overriding concern in the years immediately ahead. This concern has led to the decision of the BLS to attempt to develop a general wage index and a general price index. We now have what

amounts to a general productivity index, and these are the three main factors that economists are working with in the stability area.

There is another problem that remains from the late 1950's and early 1960's that is being given a great deal of attention. This is the problem of structural unemployment. Although the debate continues as to whether monetary policy or fiscal policy provides the best approach to generating economic growth, the economic growth problem is much better understood as a whole. It does not appear likely that we will be faced again with demand deficiency unemployment over a long period. On the other hand, the structural unemployment problem remains almost as intractable as ever.

Almost by definition, structural unemployment is a set of local problems. It is too many unskilled workers in rural agricultural areas and too few skilled workers in urban areas. It is coal miners in Appalachia with obsolete skills. This means that more information about local job markets is needed. Two statistical programs are being developed to focus on these problems. The BLS is cooperating with state Employment Security agencies to develop information about job openings for states and metropolitan areas. Planning is currently getting underway on a statistical program, which would also be operated in cooperation with state Employment Security agencies, to develop information on employment by occupation. These two statistical programs should fill some of the more important gaps in our knowledge of the situation in local job markets.

These two programs, I think, are indicative of the way that manpower information is likely to develop in the decade of the 1970's. Currently, there is a trend toward shifting some important economic responsibilities from the Federal level to the state and local level. Whether you call it

the New Federalism or revenue sharing or whatever, it seems likely that this trend will continue. As decision-making on economic affiars shifts down toward the local level, the demand for more data at the local level is increasing.

The period between World War II and 1970 was a period in which there was great progress made in developing national economic data systems. The concomitant development of an economic theory to utilize this information has greatly improved our ability to favorably influence economic developments. The Keynesian and neo-Keynesian analyses are predominantly macro analyses, and the data systems that have been developed are predominantly macro data systems. Some types of problems--such as the sluggish economic growth problem and the demand deficiency unemployment problem--have yielded to these macro approaches. Other types of problems, which are essentially local in nature, have been little affected. It appears that the time has now come to begin to develop the micro (or local) data systems that we need.

The demands for local data far exceed the capacity of the BLS or any other agency to meet them. They will have to be met over a long period of time by Federal agencies, universities, state agencies, local planning groups, and others. At the present time, the demands for local data are so great and so varied that it is hard to assess priorities for the expenditure of limited resources. I think that a major problem here is the underdeveloped state of regional economic analysis. If we are to assess priorities for local data and develop useful micro manpower data systems, we need the help of you and your colleagues in developing the analytical frameworks that are needed.

Chapter 4

Manpower Research Needs of the 1970's

Garth Mangum

I think that about the only thing I've learned in a year back on a college campus after seven years of absence is that I'm really a reactionary at heart. It seems to me that in order to discuss research needs for the 1970's, we'll have to consider what some of the research emphases of the past ten years have been. I'm convinced that no matter how rapidly the world changes or the pace of change accelerates, tomorrow will be more like today than it will be like the day after tomorrow. So we can learn something by reviewing what we've done over the last few years. Then we can see what the implications are for research emphases in the next few years.

I think the most critical thing to notice about manpower research in the 1960's is that all the way through policy out-stripped research. As researchers, we were always responding to what the policymakers had already

---

Garth Mangum is Director of Human Resources Institute, University of Utah, Salt Lake City, Utah.

done, trying to look at it after the fact to see if it made sense or if it needed modification. There was a great emphasis on evaluation of what had already been done as contrasted with identification of problems and alternative solutions which could then be presented to the policymakers who would make the alternative choices and introduce the suggested programs.

The only significant general manpower research going on at the beginning of the 1960's was that under Eli Ginsberg's direction in the Human Resource Conservation Project at Columbia.

At that time most of us were doing our research in industrial relations and collective bargaining. There's a little lesson in that. Research resources like all other resources get allocated by the market; and since the money that was available was available to do research in industrial relations and collective bargaining, that was the emphasis.

There are really three criteria for the distribution of research resources. We make our research decisions by where the dollars are (who's willing to pay us to do what as researchers), what the current policy issues are, and what data is available for us to manipulate and operate on. The change of direction during the 1960's was related to these three determinates. First, the policy attention--policy issues--shifted; and we had to be concerned about what was current in the newspapers. As the policy issues shifted, the money became available for doing a different kind of research. As good economists--whether professional economists or people responding to the workings of the economy--we shifted in those directions. Finally there is more data available in the manpower area than there used to be. The only acceptable topics for a dissertation is one that allows regressing something onto something else. Therefore graduate students

react to the availability of manpower data the way we older and more mercenary practitioners of the research act do to the availability of grants. A publication put out by the Labor Department in 1960 said the primary manpower problem of the 1960's was going to be the problem of shortages in well-trained manpower, and it made certain projections and showed how the shortages were going to develop and how important it was that people get into the manpower business and begin to develop manpower to meet these emerging shortages. Instead policy moved in quite a different direction. It moved in a different direction because we began to discover a series of different problems. The point I want to emphasize is that it was not researchers who discovered a series of problems and pointed out to the policymakers. Instead certain critical issues began to get posed to the politicians, and they were forced to make decisions. Then some of us followed the program moneys and began to do a little bit of research in these areas.

Start with the existence of high and rising unemployment and the hypothesis that technological change is a major factor in the persistently rising levels of unemployment. A good researcher would start from that hypothesis, set himself up some kind of empirical tests; he would test the hypothesis and reject it. In effect, the policymakers acted like good researchers should, even though the researchers were off doing something else. The politicians established a hypothesis when they said this is a problem of technological change. However, when they established programs to do something about retraining those people who supposedly had been displaced by technological change, they neglected to view the programs as tests of a hypothesis. Once a program is started, it is not easy to drop if you find

that the hypothesis was incorrect in the first place. Thus, with the beginnings of the Manpower Development Training Act it became obvious that the problem was not one of technological displacement--not a retraining problem--but a problem with those people who had never had any skills in the first place. The retraining program must turn into a training program. As a policymaker, you do this, not because the researchers told you that's what you have to do, but because practical experience has shown you that once you started to try to retrain people, you discovered they were people who had no skills in the first place. Once starting the training business, you discover that these people don't know how to read and write. You discover you are going to have to have remedial basic education, not because some researcher showed you that was the case but because you discovered that you couldn't train your customers by existing methods.

Another way to illustrate the extent to which policy led the way and research responded is to remind you of the three different queue theories which have been perpetrated. In the initial debates in 1962 and 1963 about whether the existing unemployment was primarily structural or primarily a question of deficiency of aggregate demand, some connected with the Joint Economic Committee and the Council of Economic Advisors suggested a view of the labor market as a queue or a group of people lined up in accordance with their relative productivity. It was suggested that the employer would take the most productive man he could find; and then if aggregate demand increased, he would take the next most productive and then the next most productive and the next most productive. All that was necessary to get full employment was simply create enough demand for labor to force the employer to reach down to the least productive man available.

Now this was a hypothesis. The next step I suppose should have been to devise some empirical test by the hypothesis. Policy did so in the tax cuts of 1962 and 1964 and the hypothesis was partially rejected. The process worked but not all that smoothly.

With more experience it was shown that as economic growth accelerated, employers could be forced to reach further down the queue, but the queue wasn't a simple one ranked in order of productivity. Instead the queue was more of a shape-up in which people seemed to be lined up in accordance with the judgments and prejudices of employers. People were lined up according to their relative attractiveness to the employer. If he liked productivity, the productive people would be at the front of the line and the unproductive people at the end. If he liked white people, they'd be at the front of the line and the black people would be at the back; or if he liked men over women or women over men--whatever the case might be--he in effect determined their ranking in the queue. People would be lined up according to their relative attractiveness to him. It might be age, experience, education, or a whole variety of things.

From this hypothesis, paraded a different set of policy recommendations. Rather than a simple recommendation to increase aggregate demand to force employers to reach further down that line, resistance is going to be much greater if this hypothesis is true. It is not really one aggregate employer but a lot of individual employers. They don't have to reach down to that next man who is not as attractive as the previous one they hired. They can instead compete for people to work in front of the line, generating inflationary pressures. This hypothesis says, as a policy recommendation, that at the same time aggregate demand is being increased to cause the

employer to want to hire more people, it is necessary to reach into the middle line and find some way to make those people more attractive. Retrain them, relocate them, give them basic education; you can do a whole variety of things to try to make them more attractive. Another possibility is to pass laws to make the employer be less discriminatory in his actions.

In this particular formulation, it was accepted that, regardless of what is done, there would be people at the back of the line so unattractive to the employer that the inflationary pressures of trying to get them employed in any other way would be too great. The government would have to act as an "employer of last resort" for these people. Out of that practical experience came a new hypothesis and from that hypothesis came programs without any particular research to test whether it was true.

Finally, now, research appears to be playing a larger role in policy-making. A new queue theory has emerged from research. It agrees to the existence of a queue but suggests that the queue be looked at from both ends. All the available labor force lines up in front of all the available employers; but, at the same time, all of those employers and their jobs, in effect, have to queue up in front of the jobseeker. Since we don't allow people of labor-force age to starve in our society, people do have alternatives to working. Therefore, they examine the jobs and choose those jobs which are most attractive. If there are some jobs that are simply not as attractive as the nonjob alternatives, they can choose to reject those jobs choosing not to work at all.

This part of the argument is that there is really a primary and a secondary labor market rather than a single one of the whole labor market lined up in one queue. There is an impenetrable wall between, and people

from one side can't get over into the other side. One side has all the attractive jobs while the other has nothing but low wage, dead-end, unattractive jobs.

Experience does support the notion that people select jobs as well as employers select people. The notion that there is such an impenetrable wall gains less support from experience. Whatever category of people you identify, the majority of them do get jobs and move ahead.

The point to be emphasized here is not the rightness or wrongness of the formulations that these were hypotheses. The first two, of course, were from practical experience wherein the policymakers responded and devised programs to fit without any great research involvement. Only now is research beginning to catch up.

Why has research been so slow in getting itself involved in the policy-making process? In the first place, of course, there was nobody doing research in this area at the beginning of the 1960's. I mentioned Eli Ginsberg's group as probably the only sizable group of people in the country involved in manpower research. They were not, however, engaged in doing manpower research that was really connected with the same problems that the policymakers were concerned about during the 1960's. Political pressures told the policymaker to start doing something about the employment problem of those we came to call the disadvantaged. There was nobody of research. There was nothing going on in could help them very much. They couldn't wait around and say to those people who were demanding service in the society and those who were exerting the political pressures, "I'm sorry but you are going to have to wait until we go out and recruit and train some researchers and get them to do some basic research so we can identify the problems.

Then we'll act." They simply had to act. If it wasn't right, they would react, respond, and change things as they went along.

Now because we have had this period of ten years in which programs were followed by money for research, people have become interested in the topic, data has been developed for researchers to manipulate, now we can begin to have research saying something about the programs that exist. Credit for that development should go primarily to Howard Rosen and his people in the Office of Manpower Research in the Labor Department who have been responsible for general academic interest and those in evaluating who have allocated more commercial types.

Now the critical question for this conference is, are the manpower research needs of the 1970's going to be sufficiently like those of the 1960's, that the rather substantial body of people now involved in manpower research can make a contribution to the policy needs while pursuing their current areas of interest. Are we going to have to perceive different needs and shift in other directions with our research activities?

Within and on the edges of government over the last few years, there have occurred a number of efforts to link the academic researcher more effectively to the policymaker. The hoped for product was the kind of research results that would allow the policymaker at the time he had to make a decision to call on a body of research for help in making his decisions. A President's Committee on Manpower was begun in 1964. Among other things, it was supposed to coordinate all the manpower policy efforts among the many agencies involved within the federal government. The hope was that the Secretary of Labor as the chairman of the President's Committee on Manpower could direct the staff who could bring about coordination among the

whole range of programs--from those programs which supplied manpower services to the disadvantaged on the one end to those programs that were heavy users of manpower such as space exploration programs, atomic energy, etc., on the other end. This Committee was also to improve the techniques for research within the federal government; for instance, to look at the techniques by which manpower projections were made and try to come up with some common or at least consistent way of making those projections and to have some kind of a quality control function. It was also to have some directing force in the allocation of research resources and establish liaison with the academic community. An organization called the National Manpower Policy Task Force was set up as an adjunct to the President's Committee on Manpower. This was supposed to represent the academic community in the sense that academic people would be appointed to it. They could assist the government people in identifying what the policy and research priorities were going to be. What happened in this case was that the government arm dropped out. If there was anything that the government agencies didn't want, it was to be coordinated. Even the Secretary of Labor didn't want the coordinating role. He wanted to direct rather than coordinate. The President's Committee on Manpower disappeared. The National Manpower Policy Task Force--a group of people who liked each other and enjoyed meeting together--has continued to function and its experiences are relevant to this discussion.

At the time I was on the government side as the Executive Director to the President's Committee on Manpower. What we thought we wanted from the academics at that time was the ideal from the policymakers' standpoint. We wanted them to sit back in their ivy towers or jet airplanes or wherever it

was that they were supposed to think and tell us what the manpower policy issues were going to be five years ahead. Then we could get busy and reallocate the federal research dollars in such a way that we could get the research done in advance of the policy need. Then when the policy need became critical, we could reach out to that body of knowledge and design programs to fit it.

I'll just give you one example of the way it worked in practice. Two of us, who in 1964 were involved as staff of the President's Committee on Manpower, came up with the view that job-creation and job-development were really going to be the critical issues. Regardless of the recovery in the economy following the by tax cut, we were convinced there would still never be enough jobs around for the disadvantaged. The government was going to have to be the employer of last resort (nowadays we call it employment). We had to find some way of creating jobs specifically for the disadvantaged rather than letting the disadvantaged take their chances in competition with more advantaged. We suggested this to the academic group that had just recently been appointed to work in concert with the President's Committee on Manpower. Of course, at the same time we and others were talking it up in government; and people within the agency got interested. The academic group began writing some papers, holding conferences, talking it over, and finally came up with a position paper saying that this, this, and this should be done in the job-creation and job-development area. A meeting was held with Secretary Wirtz. The group made their presentation, gave their papers, etc. His comment at the end of it was, "Well, I'm very glad to see that you agree that the things we are already doing and already have under way are the right things that we should be doing." The pressure had been to

design programs in these areas, and the people in government in OEO, the Labor Department and Congress who were working on it full time had simply run down the road and designed the New Careers program, the Nelson Amendment and other efforts, some still alive and some now defunct. The academics seemed to be no more foresighted than the government people in identifying the policy issues of the years ahead.

The next query was whether or not this group or a similar group could identify research priorities. The federal government has few manpower research dollars. Where should they be put to get the maximum policy impact over time out of those limited dollars. This group of very bright and knowledgeable people, all engaged in the manpower research, sought to come up with research priorities. What we learned was that every individual had a different set of priorities. We could sit around, argue, do a little log rolling, and finally come up with a set of research priorities which met with general agreement. However, we had no criteria by which we could lable this as the set of research priorities instead of another set. There was no way of demonstrating that the research needs endorsed by this group was necessarily any better than the set of priorities the responsible people within the government agency could design when they thought about the problem, and wrote out their recipe. For some bureaucrats, having a prestigious outside group to blame their decisions on would have been a boon, but not for the tough-minded crowd running the Labor Department's research program.

Finally, a third stage of that particular effort became a more modest research assessment approach. This approach simply identifies an individual who is knowledgeable in a particular area and asks him to examine all the

research that's been done in that area. He makes an assessment of the research and results to see how thoroughly the area has been mined out, what the quality of the work has been, and which sections within this broad area haven't had as much research as they should. He can then list for the research that should be undertaken in that particular area. Out of that effort has come several publications with which most of you will be familiar.

I know of no easy way to decide what research should be done and how to get it done. In the first place, money is needed to get it done; and manpower has never been an area which attracted a lot of dollars. All of us in the manpower research game are grateful for the efforts of the Office of Manpower Research in the Labor Department. They've done a remarkable job on a very, very small amount of money. I happen to be at the moment on a task force for the Defense Department in which they're trying to decide what manpower research they should be doing. They were decrying that the only money available specifically for manpower research to do the work that this task force might tell them they should be doing was something like $15 million, a terribly small chunk of money by their standards. There are actually hundreds of millions of dollars going into manpower activities in defense; but this is simply funds labelled specifically for manpower research purposes.

There are some $12 million, I think, available now for health manpower research in one pot in Health, Education, and Welfare. I think the total budget for Howard Rosen's research group is about $3 million. This area has never attracted the Congress to the extent of putting very much money into research activities. They're willing to put money into programs but very

little into research. There is not going to be a great deal of money in this area currently. The research, in effect, has to be bootlegged. At the same time that you have $3 million in manpower research as such in the Labor Department alone, you have something like $15 million for experimental demonstration projects, several million dollars for evaluation projects, the health manpower money, and a whole variety of bags of money here and there in the federal system alone which are not specifically for research purposes in general but can be used to get a good research project. For instance, much important manpower research has been done as an adjunct to evaluation studies. While evaluating manpower programs, it is possible to structure the evaluations in such a way to produce an academically respectable product and produce some really good basic research about the way the manpower system works in general.

With that background, let's look a little bit at what we're likely to be concerning ourselves with in the future. Let me start with what I think some of the priority areas of the 1970's are going to be. Then I'll talk about how we can get research done--both in terms of getting money for it and in terms of getting students and others interested in doing that kind of work. I mentioned in the beginning that I'd find myself in an increasingly reactionary mood; therefore, you'll note that as I start talking about what I think the research needs of the 1970's are in the manpower area, it is not terribly different from the research needs of the 1960's. I don't think that we've really done very much during the 1960's, either from the standpoint of research to support policy or from the standpoint of basic research about how the manpower system works in the United States. We got the research effort launched very late in the 1960's, and it seems to me that

it's rather early to start thinking about moving in any radically different directions. My reactionary mood is also reinforced by a conviction that resources are going to remain very scarce. The emphasis should go to that research which is of some policy significance--that research which not only describes the system but also identifies ways in which the system can be made to work better.

Being convinced that most everything in the system works pretty well and that it's around the margins where we find ourselves getting into trouble, we should identify the pathologies and work on them without being so terribly concerned about heavy research in some areas which seem to work reasonably well. As I start going down this list, I'm really going to be talking about emphasis on the employment problems of the disadvantaged--the area in which we've been working in the 1960's--plus the identification of a few critical areas where there are manpower shortages.

One of the remarkable things about our economy is that it seldom runs up against anything that can legitimately be called a manpower shortage. It is seldom that any individual employer really finds himself in a situation where he can't produce because he can't find the necessary manpower with which to do it. You can identify a few critical areas in the public sector, such as the medical manpower area where the demand for medical services has been increasing extremely rapidly. It is hard for the labor market to make rapid adjustments in the nonprofit sector of the economy where the market stimuli is not present to cause the reaction to take place very fast. In fact, health is abaout the only area where I would be willing to say there has really been a critical shortage.

Another critical range of manpower problems relates to the military

where--though there was no shortage because they didn't have to meet any market test and could demand and take who they wanted, there are other partially noneconomic implications. We need to spend a lot of time worrying about the social as well as economic impact of the military manpower scene. However, when we examine the healthy parts of the labor market, we do it primarily for two reasons: (1) We want to keep the healthy part well. That is not terribly hard to do, but there is a little need for preventive medicine from time to time. (2) We want to find out why the healthy part is healthy so we can help the unhealthy part of the manpower system to become a little bit more healthy.

To me, the most critical emphasis of the 1970's is the problem of the trade-off between unemployment and inflation. We as manpower researchers really only look at that from one side; but that is the really critical issue insofar as doing something about the problems of the disadvantaged is concerned. We see ourselves in the situation where all of the progress in manpower programs that has been made over the last eight years is now being negated to cool off the economy in order to slow down the pace of inflation. Unless we can find some way to continue to have a tight labor market, we're not going to do very much in the anti-poverty manpower programs for the disadvantaged area. Manpower people, teamed with general economists and fiscal monetary people, are going to have to find some way of doing something about the reduction of that trade-off. The first step is to be sure it is a trade-off. There is remarkably little evidence that the correlation between high employment and high prices is causal rather than coincidental. If not, generally unemployment is an inefficient and costly way to fight inflation.

Another emphasis, which has implications for the trade-off issue is the implications of the growth of low productivity-low wage occupations. Gilbert Burk's article in the Fortune Magazine is probably one of the most important things published of late in this area and certainly merits a lot of exploration by researchers. He points out that if we're really concerned about that trade-off between unemployment and inflation, the fact that the job growth is coming in the areas where productivity increases very slowly means that the trade-off may become worse rather than better. Something he doesn't explore in relation to that growth in the service sector is that some of the jobs that are growing most rapidly in number are some of the lowest wage of jobs. All of the talk about our increase of high technology, high production, and high paying jobs is true but may have caused us to overlook the fact that very little is happening to hospital orderlies, nurses aides and other low paying low productivity jobs which are increasing very rapidly.

The next priority is a grubby, unexciting area but one in which we have still done very, very little. It is just simply preparing people for employment. We really don't know much about it. Ivar Berg has a new book with the intriguing subtitle, "The Great Training Robbery." The title is Education and Jobs. He reaches the conclusion that most of the assumptions we make about the relationship between education and employment are farcical. He pulls together some data to indicate that it may work to the contrary--that for some occupations the more education, the poorer the employee. Whatever the realities are, we need to know an awful lot more than we do about that basic process of how to prepare people for job choices, get them prepared for jobs in whatever way they have to be, and get

them in a job. Simply ask yourself why it is that some people have every handicap that you could possibly observe and yet find themselves swimming along very well in the labor market while people who seem to be just like them are struggling, never catching hold and never really making it in the system. Is there any way of improving the system? Until you identify what the system is, you're never going to do much about improving it. Closely related to that would be the obverse--identifying what obstacles keep those people who we've come to call disadvantaged out of successful employment. What are the really critical elements of sucdess that are present for some people and missing for others so that they just never manage to catch hold?

The fourth area in which we have been doing a little and should have been doing a lot more in the last few years is to study how the system works from the point of view of trying to identify the pathologies and reduce them. How does the manpower system really work? If you take some kids that are born into the world in the state of Iowa and will some day be entering the labor market in Iowa, what is the process by which they move through the school system, through the process of occupational choice, out into the labor market, and upward in that system? We really don't know very much about how that system really works and how some people keep well and some people lose their health and how they can be restored to health.

The final area, which I deliberately put down at a lower priority than each of the other four, is the question of the meaning of work in peoples' lives. In my own interest I'd really relate it to the welfare area. I really can't get terribly excited about the difficult psychological problems of the guy who makes $15, $20, $25, or $30 thousand a year at a job that

doesn't interest him. It doesn't mean enough in his life. That's an important problem for him, but I wouldn't put it at a very high priority level for public policy. If he doesn't like his job, he can go off after work on his power boat and forget it. However, now that we find ourselves in an economy where we really give people a choice between work and nonwork, how do we make work meaningful in peoples' lives at those levels where the income maintenance structure has overlapped the wage structure? If we decide, for instance, that people should have a choice not only between working and not working, but that there should be a gray area between dependence and independence with wage supplements for the working poor as implied by the Family Assistance Plan, we're going to have to know a lot more about that gray area and how to make work meaningful in the lives of people at that level. Those of us who are on college campuses, of course, are also aware that this is not unrelated to the student unrest question--whether kids think that the things that seem meaningful in the lives of our generation are really important enough to spend all of their lives on that area.

So by way of summary: first, I don't think we've really made very much contribution as manpower researchers to date. The learning which has occurred was learned by experience rather than by research. Second, there is never going to be very much money available for general manpower research. Therefore, we're going to have to bootleg our research from many other areas such as evaluation and training where more money is available and where you can structure some of your activities to produce research results. Third, we should clean up the old before we move on to the new. There has been a great tendency over the last few months to want to turn

away from things like anti-poverty and VietNam and move on to ecology and environment. Cambodia saved us from forgetting one of those and maybe high youth unemployment this summer might save us from the other one and get us back to the basic question of how to solve the problems that we have already committed ourselves to solve. Fourth, we should stick to the study of pathologies. Study a healthy environment in order to see how to keep healthy and how to help the unhealthy get healthy. Remember the scriptural admonition that it's the sick not the well that need the physician. Finally, none of us have much foresight. None of us (at least nobody I know) are smart enough to see what the manpower research needs of five years from now are going to be. We should be trying to figure this out as far ahead as we possibly can; but when it really comes down to it, we're going to do what research there is money available for and what is of current policy interest so that it attracts us enough that we want to spend our time at it.

Chapter 5

Research as a Force for Change Among the Urban Poor

Harland Randolph

Much manpower research has been conducted in urban poverty areas in the last decade with the aim of finding ways to relieve unemployment and raise the standard of living, but few tangible changes have resulted from it.

It is little wonder that people in poverty areas place little value on academic research, particularly if it is related to unemployment. They have often been the subjects and seldom, if ever, the recipients of any long-term benefits from the research. They have a deeply ingrained sense that the system is willing to study them extensively but is really not responsive to their basic needs.

The belief, if not the fact, that manpower research has not resulted in significant benefits for the urban poor causes severe communication problems between the researcher and the urban poor.

Harland Randolph is President of Federal City College in Washington, D.C.

These communication difficulties result from several principal factors. The researcher and the urban poor emphasize different objectives and apparent, but not actual, conflicting purposes. While the researcher seeks to understand and document, the urban poor seek to change and improve their style of life.

The researcher often sees as his principal client the agency who pays for the research or the professionals who use the data in his reports. The urban poor, rightly or wrongly, demand that they should be the principle client and that their priority status can only be demonstrated by improved life styles, not improved or expanded data banks.

Another factor on the communication problems is the urban poor's perception or expectation that the implied or stated conclusion of the researcher's report will be a reinforcement of the negative image of the urban poor without a concomitant commitment to describe what is good about the urban poor in spite of poverty. The distinction between poverty as a state of being and as a state of innate worth must be maintained. People can be poor without being bad.

A fourth factor is critical. When a person has the "food" to eliminate another person's hunger and elects to study instead of nourish, a crisis of credibility, if not outright hostility, develops. When the researcher, in the interest of objectivity, does not commit his research to change but to inform, the hungry person can become hostile.

As a result of these and other factors, two essential and mandatory aspects of research are made ineffective. The research design may not deal with the basic issues of the urban poor but only with professional standards of research and the bias of the researcher. This leads to research that

provides data but not meaningful strategies for change.

The second aspect that is made ineffective is communication. Failures-in-communication occur because the researcher and the urban poor speak different languages in different purposes while using similar words. The essence of research is, in a sense, the ability to listen and observe. This ability is expressed in two ways: in the design of the questions and in the rapport with the respondent as expressed in the types of answers that are heard by the researcher.

Failures in research design and communications seriously weaken the value of much manpower research presently being conducted in urban poor communities.

In part, the concepts stated in this speech are developed to bring the interests of the researcher and urban poor into a level of compatibility where the informational needs of the researcher and the immediate life needs of the urban poor can be served simultaneously.

Research and action may be developed independently and conducted separately; however, unless at some point both actions occur, there is little value in research on manpower. The urban poor would say manpower research without jobs for the poor does not solve problems and may be a waste of money and time.

As we conducted research into the needs of the urban poor to try to find the best ways that Federal City College could serve them, some basic premises emerged. It seems to me that the urban researcher needs to be familiar with these premises if he is to conduct research that will significantly impact on the lives of the poor and if research is to be a force for change among the urban poor.

First of all, before the researcher goes into a poverty area to find ways to relieve unemployment he needs to examine his basic assumptions about employment. Those of us not in poverty value employment highly and consider having a job as a basic fact of life. The end goal of employment for all of us, but much more so for the poor, is the attainment of creature comfort--food, housing, clothing, pleasure, health, entertainment. The goal of the unemployed person who seeks a job is comfort--not work. The man who is unemployed or underemployed sees creature comfort as an immediate and direct payoff of participation in the world of work. To work for the sake of working is a benefit that only the affluent can afford. To the hungry man, working is one way to get money to buy food. It is not the only way.

Among the poor, employment competes with other desirable forms of behavior as a life style. To the poor, there are various desirable ways of obtaining creature comfort. One is to work at a low-income job; another is crime; and a third is simply to give up and make it the best way you can from friends, neighbors, welfare, etc. As researchers, we need to understand that many of the poor view these three as equally desirable alternative life styles. If we design our research on the assumption that employment in a low-income job has higher status than the other two, we have missed the essence of the life style of those into whose lives we are researching.

For example, some persons who live lives of crime take in $40,000 or $50,000 a year. Suppose that in a New Careers program we have developed a method which will enable these persons to give up crime and earn $4,000 or $5,000 a year. We design a program, and we say to the poor: "If you begin here at the entry-level job, you can get training from us, and we

will pay you while you are in training. Then you can go to school and get a GED, and later you can even go to college and we will give you a job with a career ladder built in. Next year, you'll earn a little more, and some day you may even be able to earn $8,000 a year. You can work you way up."

Yet, we know there is no money to guarantee a job promotion after training funds run out, and we know there may not be enough positions to permit the entry-level trainee to move up. We know also that there is no guarantee that the local college will accept the trainee as a student, and we know that the educational opportunities that do exist are not job-related but are to a great extent the expression of the academic community's requirement that people must earn degrees if they are to work with professionals.

The potential entry-level trainee is accustomed to the raw reality of life which revolves around how much money a person has and how he got it. He hears our analysis of the New Careers program, and he sees through it immediately. He sees a lot of hard work for a little money and an uncertain future. After a few weeks on the job, if he decides to take it, he will ask the very direct question: "When will I get promoted so I can make more money?"

The urban researcher cannot approach the urban poor on the premise that employment is ipso facto a valuable life style. To many people, employment is simply a style of life that would be preferred if they had the option to get it and if it enabled them to obtain desired creature comforts. They know that if they do get jobs, they will earn very little, barely enough for the necessities of life. In contrast, people who know how to run game on other people may be able to take vacations every day, provide

for all their basic needs, and earn more than you and I ever will. Others may be content to live at very low income levels or without income in order to avoid all the complexities of running game, whether on the streets or with the welfare department.

To decide not to work is not necessarily a condemnable trait. Many high-powered executives or overworked government officials have left the big money because they didn't want the neuroses and psychoses that accompany such work. The assumption of employment as the most desirable avenue to the satisfaction of psychosocial creature comfort must be challenged as the premise on which manpower programs and manpower research are based.

Researchers also need to recognize the shift in what the urban poor are looking for. Ten or fifteen years ago, they wanted equal opportunity. They said, "I don't care whether I actually go in your restaurant to eat a hamburger or not; I just want the opportunity to be able to." That attitude is gone now, but many of us in research don't understand that it is gone. To poor people today, the concept of opportunity is not nearly as meaningful as the concept of productivity. Many are now saying that equality of results--a product--is what they want. Because we have postponed results in the interest of making opportunity available, the time lapse between the demand and the results has been shortened. The poor are now demanding equality of results today--not equality of opportunity for the adult today with the promise of results for his children tomorrow.

This demand places a heavy burden on the researcher. The researcher says, "My job is to look at a phenomenon, not to become associated with it, but to function scientifically and describe the facts of life as I see

them." However, when we talk to the urban poor in that manner about the research we are conducting on hunger, they ask us: "When did you eat last?"

"This morning," we say.

"When is the last time you ever missed a meal?" they ask.

"I can't remember."

And the poor respond, "I didn't eat this morning. I don't know if I am going to eat today or tomorrow. I had one meal yesterday. Now, would you kindly explain to me what your research into my hunger is going to do to get me the food I need for supper today or breakfast tomorrow?"

I am not trying to suggest that research should not be conducted among the poor. I am suggesting that the researcher has to clearly identify the client his research data is intended to serve. If our analysis of the hunger of people is designed primarily to convince government agencies that hunger exists, or to allow us to publish in professional journals, or to provide data for a data bank, then we have to understand that the person who is concerned about finding food for today may not be overly anxious to cooperate with our continuous use of him in the interest of meeting some other client's needs. People in urban poverty areas now challenge us. They say, "You want to talk to me? Then pay me." Or they say, "You really want to help? Then resign your job--you can always get another one--and give us your money. Then we will give you all the information you want."

This leads to the third premise developed in our work among the poor at Federal City College. If we are concerned with serving the client who is part of the urban poor, then we have to understand his needs and the kinds of demands he makes upon us for services. If we fail to understand these,

we will not be serving him. We will be exploiting him. The demand for understanding has been placed on our institution, and I think it will be placed on any researcher concerned with the urban poor.

One of the things we need to understand is that the poor have a religious belief in the power of knowledge. The person with knowledge is sometimes expected to play the role of magician to bring about social change. The poor believe that smart people are capable of doing things. For example, we have a parking problem at the College. Every once in a while attention becomes focused on this problem, and a group will come to me and say, "You are the president of this school. Solve the parking problem." At 5 p.m. they will say, "We will be back here at ten in the morning, and we want you to have the problem solved by that time."

It is very easy to respond harshly to such a demand without perceiving the fundamental belief that underlies it. It is easy to consider the persons making the demands as ignorant or unreasonable without realizing that they are expressing an essential belief in us and a faith in our abilities because we are educated and because we have made it.

Researchers face this kind of problem. Sometimes we conduct beautiful research that meets the highest academic standards. We have controlled variables, independent and dependent variables, and controls for various vectors and variances. We use four or five different types of analysis to arrive at a composite of statements of the relative merits of a phenomenon at x level of confidence. We have many different levels of confidence on our work. Then, in conclusion, we state that our findings are applicable only to a particular isolated situation. We then try to share our findings with the poor. We say: "Your reading level is __, the unemployment rate

in your community is __, your father's education was __, your grandmother's job was __, and the present job market for you is __." We predict that unless something changes, the poor are going to be just as unemployed next year as they were last year.

There's a man about 32 years old who dropped out of school in the eighth grade and has four or five children to support. He hears our findings and says, "I could have told you that for 25 cents." Another man, whom we may consider unkind, uncouth, and unreasonable (though very articulate), suggests that the major need is not to define the reasons for his unemployment but to do something about it. The major question, he says, is: "How do the poor become employed?"

The researcher says, "We are trying to get another $5 million to look into that."

The articulate spokesman for the urban poor says, "That would be very nice but I have a better solution. Why don't you just give us the $5 million you get and we can handle a whole lot of unemployment."

As the researcher leaves the room, he hears this person saying, "Racist researchers cannot provide answers to the problems of the poor."

The term, "racist," refers both to class and to color. It is used in Harlem, and it is used in the Appalachian Mountains and on Indian reservations. It refers to outsiders who do not fully understand the viewpoint of the people they are dealing with.

The poor have two hard questions: "How do you get employed?" "What's good about it?" As long as we attempt to explain to people the causal factors for their present state of poverty that are based on the premises of the system as it exists for us, then the poverty community will be right

inability to impact in any significant way on urban change.

Those of us who are in administration and those who are action-oriented cannot wait for the research report because we know in advance that the researcher has probably done one of two things: 1) He has researched a question of information which he uses to verify or condemn a particular position, reflecting his own biases; or 2) he concludes that his findings are too limited to be of any wide-reaching significance. To action-oriented administrators, the researcher today is not a force for change but simply a person who verifies what we knew in the beginning.

The urban researcher must understand the demands of the urban poor. They are very simple.

1. There must be a product at the end of your research. "If you are going to find us jobs, make them real."

2. "Help us to profit quickly. Let us increase our cash flow so that we can obtain some of life's comforts."

3. "Help us develop a new image."

When the poor say they want a new image, they mean they would like to have the kind of image that would cause other people to want to be associated with them. They are tired of hearing the negative findings of research reports. For example, researchers who have studied employment of the poor have concluded: (1) they don't report to work on time, (2) their turnover rate is very high, (3) they cause personnel problems and personality clashes on the jobs, (4) they have language difficulties, and (5) it is necessary to institute massive training programs for them. Such findings build into the employment situation an a priori assumption that anyone who is poor is going to bring a lot of problems to the job. The poor know that employers will

in saying, "You are not an objective barometer of reality. You are, in fact, pre-programmed to provide objectifying data which substantially perpetuates and locks in concrete those factors in the system which are responsible for our deprivation."

This is why people in the poverty community will ask the researcher, "Why pays you for what you are doing? How much? What would you do if you didn't get paid for your research? Would you still come here and ask us these questions?" After you try to answer those questions, they may then ask, "Do you have any free time that you could give to help somebody here learn how to do what you do? That way, you wouldn't have to lose your job, and you can help one of us get one."

We usually respond by saying that our work is, in our best judgment, the most helpful thing that we can do for the poor. Then the poor go back to the two questions: "How do you get employed?" "What is so good about it?"

If we want to make any impact among the poor, we need to understand the premises from which they react and respond to the researcher and to research work. Researchers can always go door-to-door and find people who will answer their questions. That's no problem. However, if we want to deal with members of the poor community who are committed to change and we do not understand their problems, we will find that the door-to-door communication between the researcher and the poor never is opened. We will never touch the creative genius of the poor community. We will simply talk to mirror images of ourselves and get verification of our own psychoses. The inability of the researcher to become more than a barometer of his own attitudes and beliefs is an indication of the sterility of research today and of its

have negative expectations of them. What happens in the social-psychological situation when the employer's expectations are negative and the poor know it, is that conflicts rapidly become interpreted as class conflicts rather than as performance conflicts. Once they assume the character of class conflict, the only solution is a fight for power rather than an attempt to change behavior or performance. It is extremely important for the researcher to be concerned with the potential harmful effects of isolated data.

In essence, the poor today are asking us to focus attention on their strengths as well as their weaknesses and to help them become able to do something within our system. If we are to be a force to change and human betterment, then we need to listen to the messages from the poor as we construct our research designs and as we begin to interact with the poor. We must do more than record observations when we go into the poverty community.

Chapter 6

The Development of Manpower and Human Resource Programs in Colleges and Universities

J. Earl Williams

Three major streams of development or types of influence appear to have contributed most to the development of manpower and human resource programs in colleges and universities. First, the growth of industrial relations centers; second, the manpower institutional research grant program of the Research Division, U.S. Department of Labor; and third, the recognition by a variety of individuals and institutions that the university had contributed greatly to the agricultural and industrial revolutions which resulted in many contemporary economic and social problems. Consequently, the university has a social responsibility to make immediate and continual contributions toward the solutions of those problems.

J. Earl Williams is Director of the Human Resource Research Institute at the University of Houston in Houston, Texas.

The Growth of Industrial Relations Centers

There are several antecedents which contributed to a full-blown industrial relations center, and they have separately and collectively been significant influences in the development of manpower and human resource programs. First, there is curriculum development. As Dean L. Reed Tripp pointed out in his 1964 study,[1] graduate study in economics and sociology made a significant contribution to industrial relations as early as the 1930's. It follows that he was specifically referring to labor economics and industrial sociology. While it is true that even these areas of emphasis within the two disciplines may have been more concerned with the industrial relations aspects per se, the labor market and manpower aspects have always been there. Thus, from 1933 to 1953, there were 42 Ph.D. degrees in industrial sociology granted by ten major universities and 254 Ph.D. degrees granted in labor economics by the same institutions.[2] However, more than 75% of the sociology degrees came during the period 1948-53, and 60% of the economics degrees came during this period. It should also be noted that 20 of the 42 sociology degrees were granted by Chicago, and Wisconsin led in the granting of Labor Economics degrees with 60, followed by Harvard with 48 and Chicago with 38. The increased emphasis on these degrees during the 1948-53 period may have been a contributory factor to the development of an interdisciplinary industrial relations degree at

---

[1] L. Reed Tripp, "The Industrial Relations Discipline in American Universities," Industrial and Labor Relations Review, Volume 17, No. 4, July 1964, pp. 612-618.

[2] Ibid., pp. 615-616. The schools were: Cornell, Harvard, Yale, California, Princeton, Chicago, Illinois, MIT, and Wisconsin.

Cornell by 1953 and at Wisconsin by 1955. Also, it is worth noting that the expansion of these degrees started in 1948, the year in which the Industrial Relations Research Association was founded. At any rate, a 1962 mailing list prepared by Michigan-Wayne State listed 72 industrial relations centers in Canadian and American universities. Dale Yoder forwarded a questionnaire related to students and curriculum to 29 of the centers and received full reports from 24 of them.[3] Thus, he reported that, by 1962, 75% of the schools were offering master's degrees with industrial relations as an area of specialization, and 13 of the schools offered industrial relations as an area of specialization for the Ph.D. Also, enrollments had increased at 13 of the schools with master's-level programs, and in 9 of the 13, Ph.D. programs during the period 1959-1962. Thus, it was now common practice to pull out of their separate disciplines labor economics, industrial psychology, industrial sociology, labor law, and personnel management from commerce to form major inputs into an industrial relations degree. Fourteen of the schools in the Yoder survey reported the total number of courses in their industrial relations programs, and it ran from 4 to 54. None of the 24 schools reported a decline in courses, and 15 reported an increase. Some of the new ones included manpower management, industrial relations systems, public policy in human resource development, etc. Thus, the manpower oriented course was beginning to develop at this early stage as part of an industrial relations curriculum. Today, it is

---

[3]Dale Yoder, "Changing University Industrial Relations Programs: On Campus Teaching." Proceedings of the Fifteenth Annual Meeting. Industrial Relations Association, Pittsburgh, December, 27-38, 1962, pp. 100-106.

common practice for manpower to be an area of specialty within the graduate industrial relations program.

The second important antecedent is research. Further, it is clear that the development of the Industrial Relations Research Association gave much of the original impetus for increased emphasis on industrial relations research. Even though most of the original founders had backgrounds in labor economics and law, they had had much experience in government and were extremely familiar with labor-management relations. Thus, the new association's purpose included:

> ...the encouragement of research in all aspects of the field of labor - social, political, economic, legal, and psychological - including employer and employee organization, labor relations, personnel administration, social security, and labor legislation; etc.[4]

It is also clear that, as Milton Derber stated, from its inception industrial relations has regarded itself as a policy science.[5] Nevertheless, in a 1962 study of research activities of I.R.R.A. members, Gerald Somers was distressed by what he termed a tendency of industrial relations researchers to follow the headlines.[6] While he had no category entitled

---

[4]Tripp, op. cit., p. 612, as taken from Industrial Relations Research Association, Membership Directory, 1960, Constitution, Purpose, p. 2.

[5]Milton Derber, "Changing Patterns of Research in Industrial Relations Centers," Proceedings of a Regional Conference, the International Industrial Relations Association, Chicago, Illinois, May 17-18, 1968, p. 43.

[6]Gerald Somers, "Constancy and Change in Industrial Relations Research Programs," Proceedings of the Fifteenth Annual Meeting, the Industrial Relations Research Association, Pittsburgh, December 27-28, 1962, pp. 111-115.

manpower per se, his labor market category covered manpower topics and the percent of research activities in this category moved from 21.4% in 1957 to 22.2% in 1958 to 37.5% in 1962. Of course, this still leaves almost two-thirds of the research efforts in the traditional industrial relations areas right at the time when the impact of technology, structural unemployment, and poverty was upon us. Also, while the number of labor, management, and government practitioners who participated in the study was not reported, to the extent that they did, it is largely a reflection of the fact that they must, of necessity, concern themselves with solutions to current problems. Finally, while the study did not tell us anything about the emphasis of academic researchers in industrial relations programs, Professor Somers issued the following warning:

> If industrial relations research is to play a more influential role in policy formation, the researcher must break his connection with the ephemeral happenings of the day. Long-range research projects, based on carefully formulated theoretical propositions, will be more productive of useful policy recommendations when such recommendations are required than a tilting at the windmills of passing fancy. Usefully applied industrial relations cannot spring full blown out of a vacuum of desire to influence policy. It must stem from basic, long-term research into continuing industrial relations phenomena.[7]

At the regional meeting of the International Industrial Relations Association held in Chicago on May 17-18, 1968, Professor Derber was asked to evaluate the state of industrial relations research. He largely agreed with Professor Somers' 1962 conclusions; in fact, he quoted the above paragraph as still being appropriate. He had also made a study of 15

---

[7] Ibid., p. 115.

industrial relations centers to determine the trend of their research.[8] The labor market area rose from 9.0% of the total in the 1956-59 period to 11.3% in the 1960-63 period, to 18.3% in the 1964-67 period. The manpower-related area increases when unemployment and poverty are added. This area increased from 2.6% in the first period to 3.9% in the second to 8.3% in the last. Nevertheless, when the two areas are added together, it is still considerably less than the membership reported in 1962 when the major manpower-related problems of the day were much less clearly defined. Thus, if headline following was involved, it appears that the broad-based membership of I.R.R.A. was much more involved than 15 major industrial relations centers.

Professor Derber further stated that:

> What is sometimes reported as research is often a "think piece" or a highly impressionistic essay. Some of the reports are so elliptical that it is not always clear what the project is really about.[9]

At the same time, he reported that:

> Not only did the centers fail to get excited about technological change problems, which one would be inclined to regard as of great long-range importance, but they lagged badly in areas which were soon to make the headlines -- race relations and public employee relations.[10]

---

[8] Derber, op. cit., pp. 43-48.

[9] Ibid., p. 44.

[10] Ibid., pp. 45-46.

Thus, despite his concern for the development of a discipline, it is good to see Professor Derber express concern over the lack of emphasis on some of the real problems contained in the headlines. He further suggested that many other disciplines were making real contributions and we should build bridges to them.

On the same panel at the Chicago meeting was Herbert Heneman, Jr.[11] He gave manpower-related topics the highest priority within the industrial relations area. In fact, he felt that "the employment standard has replaced the gold standard." However, he was critical of the quality of research, including that of the I.R.R.A. proceedings and research volumes. He indicated that we often measured trivia, were victims of our models, and were so concerned with purity within the older disciplines that second rate mathematicians "loftily cast aside institutionalists and other lower order persons who admit to interests in real life."[12] To illustrate the communications gap between the researcher and the user of research, he quoted a study by Dunnette and Brown which showed that only a small proportion of 200 business executives had ever heard of the major works in behavioral science research. Dunnette and Brown concluded that, "the researchers (were) overly imbued with instrumentation, and the executives (were) not interested in research not directly relevant to real life problems."[13] This brings to mind an

---

[11] Herbert Heneman, Jr., "Contributions of Industrial Relations Research," Proceedings of a Regional Conference, the International Industrial Relations Association, entitled The Role of Industrial Relations Centers, Chicago, Illinois, May 17-18, 1968, pp. 49-58.

[12] Ibid., p. 51.

[13] Ibid., p. 53.

I.R.R.A. survey of a few years ago in which 90% of the professionals serving as practitioners in the industrial relations field had not heard of the top names in the field, and of the remaining 10%, only one-tenth had ever found any use to be made of the research results.

Professor Heneman may have been pointing industrial relations specialists in a new direction when he concluded that the Manpower Report of the President was the most significant industrial relations publication of the 1960's, and that it had become the handmaiden of policy. Further, he felt that the most substantive payoffs in research had been mostly in manpower and the most urgent research needs were in manpower.

As a discussant to the Derber and Heneman papers in 1968, Ed Jakubauskas did a most effective job in outlining the problems of the discipline of industrial relations.[14] Some of the major points he made were as follows:

1. While the industrial relations researcher decries preoccupations with the headlines, he often persists in following the headlines of the 1930's and 1940's.

2. He has a keen sense of locating himself close to the center of change in society and in many cases contributes to change through his dual role in academic and the nonacademic action world.

3. Since he is concerned with problems and public affairs, he tends to become uneasy and feels that he must legitimize his activity as research, both to himself and to the academic community.

---

[14] Edward B. Jakubauskas, "Discussion," Proceedings of a Regional Conference, the International Industrial Relations Association, Chicago, Illinois, May 17-18, 1968, pp. 59-62.

More specifically, he spelled out that the central question for discussion should be:

> How can better research be generated at the frontiers of knowledge by research centers which are concerned with the employment relationship, and how can this knowledge be applied more efficiently to the solution of problems?[15]

Further, he made a number of worthwhile suggestions related to such items as large-scale data systems, cooperative studies by industrial relations centers, and predictive and experimental research which can be used by action agencies.

Wallace C. Lonergan also served as a discussant of the Derber and Heneman papers. He immediately pointed out that:

> One reason why it is hard to understand the changing patterns is that little codification exists of the activities and roles of social scientists and practitioners who engage in action research and in policy planning for agencies and organizations, or who serve as consultants to leaders and managers of organizations.[16]

Professor Lonergan also spelled out the process of development used in improving organizations by the Industrual Relations Center of the University of Chicago. It was action-oriented and included consultation and technical assistance in identifying problems, developing programs, implementing programs, training personnel for the programs, evaluating programs, and

---

[15] Ibid., p. 60.

[16] Wallace C. Lonergan, "Discussion," Proceedings of a Regional Conference, the International Industrial Relations Association, Chicago, Illinois, May 17-18, 1968, pp. 62-65.

finally, aiding in revision of plans and development of long-range objectives. He concluded by stating:

> I feel that any field concerned with improving policy and practice will be more action-oriented and applied in its approach. We should acknowledge this and get on with our mission. This acknowledgment reinforces the contribution of basic research from all the fields to industrial relations, and through more effective and efficient application, to society.[17]

One might conclude from the foregoing that some of the better known researchers in the industrial relations field are preoccupied with the development of a discipline, chasing headlines of by-gone years, and concerned only with long-time pure research while the lesser known researchers are more action-oriented, chasing today's headlines, and concerned with short-term research related to policy and solutions of real problems existing today. However, the bark of the better known researchers is worse than their bite. Dr. Derber has often recognized the needs expressed by the younger researchers, is concerned with lags related to current problems, and in a recent book, points out that it is much more crucial to have strong relations between academicians and operators in industrial relations research than in most fields.[18] He indicates that the operators control most of the raw data, the decision to undertake research is often a government, not an academic, one and academic evaluation may be preferable to self-evaluation.

---

[17] Ibid., p. 65.

[18] See especially Chapter VII in Milton Derber's Research in Labor Problems in the United States, Random House, New York, 1967.

Professor Somers was pioneering in manpower training research in the early 1960's, including benefit-cost analyses; and, as Co-Director of the Center for Studies in Vocational and Technical Education at the University of Wisconsin, he has helped to point the way to needed short-term and long-run research in this area, and has disseminated the results of research through numerous conferences. Further, in 1968, he was making important recommendations regarding such mundane, everyday, current problems as identifying the kind of data needed for monitoring and evaluating manpower programs. In his recommendations, he appeared to be saying that industrial relations researchers could contribute to improvements in existing operating data and their utilization and should utilize special sample interview surveys and experimental research in evaluation of manpower programs.[19] In short, this writer is very appreciative that Professor Somers convinced him to tilt at the windmill of retraining when the Area Redevelopment Act was in the headlines in the early 1960's.

In addition to the teaching and research functions, the extension or public service functions have had an impact on the structure of newly developing centers. This is especially true of the labor and management education programs. Using labor education as an example, there were only six such programs up to 1945, but 5 more were added in 1946, and by 1962, the number was up to 24, with a majority of them in or related to industrial relations centers.[20] At first the faculty support was limited to a few

[19] Gerald Somers, "Data Needs for Monitoring & Evaluating Manpower Programs," Proceedings, Industrial Relations Research Association, December 29-30, 1968, pp. 97-104.

[20] Fred Hoehler, Jr., "The Changing Nature of University Labor Education Programs," Proceedings, Industrial Relations Research Association, Pittsburgh, December 27-28, 1962, pp. 119-122.

idealists and others who had been involved with the labor movement, but soon it was necessary to call on the faculty of several disciplines for materials, teaching and advice. Thus, by the early 1960's many universities had given rank and tenure to personnel in labor education. As Robert Risley described the Cornell program in 1968, he expressed the view that all industrial relations centers recognized the necessity of a close link between the practical and the academic world. At Cornell, the extension service engages in a never-ending basic education and training of practitioners, meets special needs of selected groups, provides information and education regarding new developments and trends, and conducts workshops, conferences and institutes which seek to provide opportunity for practitioners to explore economic, social and political problems.[21]

Finally, Mr. Risley points to the advantages which accrue to an industrial relations center through its extension function. For example, during the period 1963-67, more than 49,000 people were served by the extension program; but the total alumni for all time for the graduate and undergraduate programs is only 2,158.[22]

Given the advantages and contributions of teaching, research, and extension activities, the conclusion of a 1967 study by Julius Rezler should not be surprising.[23] Mr. Rezler surveyed 48 of the apparently 72

[21]Robert F. Risley, "Extension Activities of Industrial Relations Centers," Proceedings of a Regional Meeting, International Industrial Relations Association, Chicago, May 17-18, 1968, pp. 21-31.

[22]Ibid., p. 28.

[23]Julius Rezler, "The Place of the Industrial Relations Program in the Organizational Structure of the University," Industrial and Labor Relations Review, Volume 21, No. 2, January 1968, pp. 251-261.

industrial relations programs in existence at that time. The study showed that almost 28% of the programs were accorded a status higher than the department level and more than one-third had directors with ranks higher than department head. Further, almost 26% of the directors reported to either the academic vice-president or the president. More importantly, as Tables 1 and 2 clearly indicate, it is common to mix teaching, research, and extension programs under one umbrella. For example, almost two-thirds of the programs have nondegree labor and/or management education, all of them engage in research, and more than 50% either offer their own degree programs or else offer courses toward degrees in other departments. In summary, industrial relations centers have been a visible demonstration of the viability of a multi-faceted approach in the development of manpower and human resource centers.

The Manpower Research Institutional Grant Program

The second major influence in the development of manpower programs in colleges and universities, the Manpower Research Institutional Grant Program, began in June 1966 when grants of approximately $75,000 per year (for a period of three years) were awarded to each of the following: Atlanta University, Iowa State University, University of Maine, Norfolk State College, North Carolina State University at Raleigh, Oklahoma State University, and Temple University. Criteria for selection depended largely on the potential of the applicant to achieve the following objectives:

> 1. Research. To stimulate and support systematic, long-range programs of interdisciplinary research on manpower problems; to develop within academic institutions capabilities for providing technical support to local and regional organizations concerned with manpower problems;

Table 1

Main activities of industrial relations programs
at American & Canadian universities, 1967

Type of activity	Number of programs	Percent of total programs
Degree program	15	31.9
Graduate program only	10	21.3
Undergraduate program only	2	4.3
Both programs	3	6.3
Credit courses offered toward degrees granted by other departments	9	19.1
Nondegree labor and/or management program	30	63.8
Research only	7	14.9

Note: Totals exceed the number of respondents because many industrial relations programs are engaged in multiple activities.

Source: Julius Rezler, "The Place of the Industrial Relations Program in the Organizational Structure of the University," Industrial and Labor Relations Review, Volume 21, No. 2, January 1968, p. 256.

Table 2

Scope of industrial relations programs
at American & Canadian universities, 1967

Scope of activity	Number of programs	Percentage distribution
First category		
Own degree program Credit courses Labor-management education Research	6	12.8
Second category		
Own degree program Credit courses Research	9	19.1
Third category		
Credit courses Labor-management education Research	8	17.0
Fourth category		
Credit courses Research	1	2.1
Fifth category		
Labor-management education Research	16	34.1
Sixth category		
Research only	7	14.9
Total	47	100.0

Source: Julius Rezler, "The Place of the Industrial Relations Program in the Organizational Structure of the University," Industrial and Labor Relations Review, Volume 21, No. 2, January 1968, p. 257.

> to improve communications among manpower researchers; and to improve dissemination of research results.
>
> 2. Training. To encourage study of manpower problems among students in various disciplines; to develop students' research capabilities; and to introduce manpower courses or curriculums.[24]

A report for the first three years has been issued. It is very general in nature, skimpy, vague in some areas and is, at best, a listing of activities rather than an attempt to analyze and/or evaluate the results of the first three years. Given the limitations of the data contained in the report, an attempt will be made to discuss this program under the same three headings which were used in relation to the industrial relations centers, curriculum, research and extension. This approach is also consistent with the objectives outlined above.

First, in regard to courses, each of the six schools with graduate programs added at least one new course of a manpower nature; and this ranged up to eleven, which were added at Temple. Norfolk State College, which has no graduate program, added a two semester workshop related to manpower. As Table 3 indicates, it is impossible to tell how many new manpower courses, in total, were added by the schools after the research program started. It may be as low as 21, but it could be as many as 26. Also, some of the courses are normal labor economics courses rather than manpower courses. During the period, a manpower major at the master's level was established within the business, sociology, and social work curriculums at Atlanta

---

[24] The Manpower Research Institutional Grant Program: The First Three Years, Manpower Administration, Office of Manpower Research, U.S. Department of Labor, 1969, p. 1.

Table 3

Degree program and curriculum changes instituted during the first three years of the Manpower Research Institutional Grants

	Manpower and manpower-related courses		Manpower as a major field		Interdisciplinary manpower degree
	Under-graduate	Graduate	M.A.	Ph.D.	
Atlanta University		6*	Bus. Soc. Soc. Work		
Iowa State University	1	2		Econ.	M.A. in Ind. Rela.
University of Maine		2-sem. wk.shop			
Norfolk State College	2-sem. wk.shop				
North Caroline State		3		Econ.	
Oklahoma State University		1**			
Temple University		11	Econ.	Econ.	
Totals		26***	5		1

* It is not specified how many of these are new courses. This number is probably too high.

** It is stated that all schools set up at least one new Manpower related course, but Oklahoma may have set up more.

*** Estimated (see notes above).

Source: The Manpower Research Institutional Grant Program: The First Three Years (U.S. Dept. of Labor, Manpower Administration) 1969, pp. 29-31.

University and in economics at Temple. A manpower major at the Ph.D. level was established at Iowa State, North Carolina State, and Temple. One interdisciplinary manpower degree was established as an M.S. in Industrial Relations at Iowa State. It is also reported that of the 150 students receiving substantial financial aid under the program, 46 earned master's degrees and 13 completed bachelor's degrees. In addition, 400 other students related to manpower in some way such as taking a manpower-related course, enrolling in a manpower degree curriculum, or working occasionally on center staff research projects. The report indicates that among these indirect participants, 2 earned the bachelor's degree, 40 the master's, and 11 the Ph.D. degree.

Tables 4 through 6 give some indication of research results during the first three years of the program. A total of 178 publications, papers, proceedings, and student theses and dissertations are listed in the report. The vast majority were performed by faculty and staff with only 25 master's theses reported and 10 Ph.D. dissertations. Thus, if all 25 of the master's theses were written by students who received substantial financial aid, this would still leave less than 60% of them writing a master's thesis in the manpower field and none of the 40 master's were indirect participants. Of course, the larger the number of manpower theses in the latter category, the lower the percent for those receiving substantial financial aid. As Table 4 indicates, 10 Ph.D. dissertations are listed in the report, although none is claimed under the section related to financial support for students. Thus, it would appear that all of those listed are the work of faculty and staff for degrees taken at other institutions. In summary, this is an average of less than 1 1/2 graduate theses per year for each of the 6

Table 4

Publications, papers, proceedings, and theses,
Manpower Institutional Research Grant schools,
at student, faculty/staff, and school percent of total, 1966-1969

	M.A.	Ph.D.	Faculty/staff	Total	% of total
Atlanta University	7*	1	5	13	7.3
Iowa State	5	0	51	56	31.5
Maine University	2	0	4	6	3.4
Norfolk State	0	0	5	5	2.8
North Carolina State	3	8	32	43	24.0
Oklahoma State	10	1	19	30	17.0
Temple University	0	0	25	25	14.0
Total	27	10	141	178	100.0

* Two were student reports.

Source: The Manpower Research Institutional Grant Program: The First Three Years (U.S. Department of Labor, Manpower Administration) 1969, pp. 7-28.

Table 5

Publications, papers, proceedings, and theses, Manpower Institutional Research Grant schools, topical categories, by percent, 1956-1969

	%
Labor relations	13.5
Labor market	30.9
Manpower programs, evaluation and policy	21.9
Education	7.3
Social insurance and welfare	10.7
Personnel and human relations	6.2
Economic development	7.9
Miscellaneous	1.6
Total	100.0

Source: The Manpower Research Institutional Grant Program: The First Three Years (U.S. Department of Labor, Manpower Administration) 1969, pp. 7-28.

Table 6

Research topics oriented to the region
under the first three years of the
Manpower Research Institutional Grants

	Labor market	Manpower	Economic development	Vocational education	Higher education	Total
Local*		3		1		4
City	3	4	2	2		11
State	16	6	4	4		30
Regional	4		3	1	1	9
Total	23	13	9	8	1	54

* This includes single projects within a city, not covering the entire city.

Source: The Manpower Research Institutional Grant Program: The First Three Years (U.S. Department of Labor, Manpower Administration) 1969, pp. 8-28.

schools which offer graduate work. In addition, less than 30% of those reported to have received master/s degrees during the three year period are listed as having a thesis related to the program; and several of those listed are not in the manpower field.

Of the total research efforts, Iowa State has 31.5% of the 7 school total; and when North Carolina State is added, the two have more than 55% of the total. Three of the schools had virtually no research to show for their three-year effort. Although it was difficult to classify much of the research, it is clear from Table 5 that the percent of manpower and manpower related research in the research grant environment is greater than under the earlier industrial relations studies. For example, in the Somers study of 1962, 37.5% of the IRRA membership research was in the labor market area. This dropped to 30.9% in the research grant program, but it was necessary to add a category entitled "manpower programs, evaluation and policy," which contained another 21.9% of the research and an "education" category which was manpower related and contained 7.3% of the total research. Thus, at least 60% of the research under the Department of Labor program was manpower related compared to almost 40% in the Somers study. At the same time, almost as large a percent was in the labor relations area as was present in the Somers study (13.5 compared to 14.4) and only a slightly higher percent in the social welfare area than in the Somers study (10.7 compared to 8.4). Finally, as indicated in Table 6, about 30% of the total research effort was oriented toward the region, state or local area. A larger percent of the geographically oriented research is manpower related than is true of the total effort.

It is difficult to get a clear picture of the third area, that of

extension efforts. However, there were a total of 21 conferences sponsored by the grant recipients (Table 7) for an average of only one per year per school. All of these were not manpower conferences and all did not appear to be directly related to the objective of dissemination of research results. Iowa State did the most extensive dissemination of research results by distributing its publications to 69 colleges, universities and higher education associations cooperating with their program in the six state, Great Plains Region, as well as to industrial relations centers, libraries and interested groups. Further, 16 of the 21 efforts were split evenly between Iowa State University and Temple University. Most of the schools gave some technical assistance in manpower program development, and/or planning at the state and/or local level. Again, Iowa State and Temple were the most active.

While it is clear that the results of the first three years of the manpower research grant program are uneven and probably did not achieve as much totally as had been anticipated, the purpose of the discussion was not to evaluate the program. Rather, what impact has it had on the development of manpower and human resource programs? First, it is clear that the two schools that have been more industrial relations oriented, Iowa State and Temple, have been the most active overall. It is not clear how much these two schools, and perhaps North Carolina State, did that they would not have done in curriculum and research without the grant. In extension activities it is obvious that the grant was a major factor at Iowa State and Temple. It is doubtless true that much of the research performed by scholars at some of the schools would have been performed under any circumstances, and it was virtually begging the question to list it; but, on balance, a greater total effort was surely achieved, and it is more manpower oriented than has been

Table 7

Conferences sponsored by the Manpower Research Institutional Grant recipients 1966-1969

School	Total	Conference topics									
		Labor market		Manpower				Urban problems	Poverty	Ind. Rela.	Soc. Econ.
		Genl.	Employ.	Genl.	Research	Hum.Res.Dev.	Health				
Atlanta University	1			1							
Iowa State University	8				3	1	1	1	1	1	
University of Maine	0										
Norfolk State College	3		1			2					
Oklahoma State University	1	1									
Temple University	8	2				1		2		1	2
Total	21	3	1	1	3	4	1	3	1	2	2

Source: The Manpower Research Institutional Grant Program (U.S. Department of Labor, Manpower Administration) 1969, pp. 38-42.

true of industrial relations programs. Thus, at a minimum, it can be concluded that the research grant program has promoted the industrial relations model, given it more of a manpower orientation, and has given impetus to the development of long-range manpower programs at the recipient institutions, as well as food for thought to those institutions which have come in contact with the program. In addition, the Department of Labor has recently awarded manpower research grants to 12 additional schools. Eight of the proposals have been reviewed by staff at the University of Houston. It is difficult to tell, with any precision, what is planned by the schools. However, given the experience of the last three years and the fact that the effort at several of the new schools is to be directed by outstanding manpower researchers (for example, Garth Mangum at Utah), this new program will doubtless continue the development of long-term manpower programs.

Meeting the Social Responsibility of the University

Given the technological revolution previously mentioned, plus the reaction of government in the form of programs and policy, there has been increasing pressure on the part of the community for the university to assist in bringing order out of chaos and in solving problems related to the development, allocation, and utilization of human resources. This generally has resulted in a request and/or need for several services.

First, there was the need for technical assistance to assist in identifying problems, conceptualizing solutions, and developing and evaluating programs. Second, there was the need for training and orientation of professional practitioners hired for new responsibilities. Third, there was the need to disseminate information broadly to the community and to the

relevant areas of practice rather than specifically in training and orientation sessions. Fourth, there was the need for interdisciplinary research so that a problem could be traced from beginning to end regardless of what disciplinary field it might enter. It was strongly felt that the university has been more concerned with the theoretical, pure, and/or esoteric kinds of research and that the challenge was to relate to new public solutions through action-oriented field research which could contribute to the development of programs and public policy. Finally, it was realized that human resource oriented interdisciplinary curriculum has to be developed in order to meet the unprecedented demand for knowledgeable professionals in this area and to make more manageable the four needs previously mentioned.

The university response to this challenge has varied considerably and in an almost opposite developmental pattern to the first two major influences discussed. For example, it often has started with extension and/or action programs and moved toward research and curriculum rather than the opposite. Some have developed a human resource emphasis within an old discipline; old interdisciplinary programs have swung in new directions, and new interdisciplinary programs have developed. Some were able to expand their budgets while others sought funds on a project-by-project basis in order to meet new obligations and others were able to utilize funding from one project as seed money to expand into fully developed university programs.

The Center for Human Resources in the College of Business Administration, University of Houston, is a good example of this latter approach. The urban community was crying for assistance in the aforementioned areas. In giving the writer the authority to develop a center to meet these needs, both the College and the Center recognized that:

1. The university is a repository of resources and expertise capable of meeting the increasing demands of the human resource area.

2. Human resource problems are a proper concern of a public university.

3. An interdisciplinary approach to the problems of the human resource area is necessary for proper perspective and maximum results.

4. The emphasis of the university should be upon the prevention of human resource problems in the future by preparing business, labor, government, and other community change agents. In effect, the university must be the change agent.

5. Universities have tended to be discipline-oriented; thus, it is vital to have a center which is problem-oriented.

6. Only the university can do the basic research on fundamental questions and problems of public policy. Freedom of inquiry is possible when a project is placed in the university.

7. There must be an exchange of ideas between academic persons and the practitioner.

8. There must be personal involvement in the actual human resource problem area, in order to develop more practical solutions to complex problems.

The newly authorized center developed a demonstration project and requested funding from the Division of Special Programs of the Manpower Administration. More than $110,000 was granted to perform this demonstration in the Houston area. The primary objective of this demonstration project was to explore how a university could use its educational capability and position in the community to contribute significantly to improved understanding and functioning of manpower programs in its area by conducting

conferences and developing training and other manpower and educational assistance for manpower program personnel, smaller colleges, and employers. However, the secondary and more important long-run objective was to explore and develop a working order whereby a major university might serve the needs of a community in the area of manpower and human resource development. Further, it was felt that the fulfillment of these objectives would elicit university and community support to the extent that the Center would become a permanent and major entity in the university structure with a core of financial backing at the state and local level. A brief summary of the results of this demonstration project and its spin-off effect on the long term goal is as follows:

1. The small college manpower lecture series was conducted with eight predominately black colleges and two predominately white. There were faculty orientation sessions and dissemination of manpower information. One conference brought the business community into the college for dual orientation. Another, sponsored jointly with the Dallas Urban League, brought six Negro colleges together with major employers. Some of the longer term results have been the development of human resource curriculums at two of the colleges, the development of cooperative-funded projects with four of the schools, and technical assistance to six of them resulting in funding.

2. Major manpower and human-resource related conferences were held with professional practitioners on such subjects as "Correctional Manpower Training," "The Human Resource Development Program," and "Women in the Labor Force," which led to other conferences covering such topics as technology, automation, and urban affairs.

3. The Houston employer program was designed to provide information and

orientation on the one hand and to stimulate employer involvement in the employment and training of the hard-core unemployed on the other. Not only did employers become much more involved, but also the center did major orientation efforts with the Houston National Alliance of Businessmen, training of supervisors of the hard-core, and received financial support from business in the development of a book which analyzed all manpower-related programs in Houston.

4. The staff development programs for manpower-related agencies have never stopped spinning. Starting with minor work with state employment security personnel, the Center moved into Community Action Program and Concentrated Employment Program staff training. At this point funding was received from the Office of Economic Opportunity to train members of organized labor from eight states to be community developers and play a major role in the war on poverty. Training by university staff has reached 200 directly and at least 800 more by joint efforts with labor volunteers in the field. In addition, the Center is currently preparing to administer a Public Service Career Program, whereby 50 hard-core unemployed will be hired by the University and put into training and career ladder occupations while an additional 50 will be placed into upgrading programs.

5. The Center's OEO training project called attention to the university capabilities in the labor education field. Thus, in a manner similar to some industrial relations centers, a division of labor education has been established. Development has been extensive and programs given or scheduled run from Florida to Utah. Only a lack of sufficient staff time slows the progress of this program.

6. It goes without saying that a demonstration program which was

oriented toward technical assistance would snowball. Thus, in 3 1/2 years the Center has performed technical assistance and informational services to more than 200 organizations. It has given assistance in program development and policy planning to the Texas Governor's office, State Senate and House Committees, the Houston Mayor's office, etc. The demand for speeches, presentations, panel appearances, etc. is so great that the Director has averaged two appearances a week since the Center began operations.

7. It is clear that in performing the obligations of the first project that it was necessary to engage in research. In addition, other formal research projects have developed such as a study of teenage unemployment for the Office of Research, U.S. Department of Labor, research and evaluation of an experimental approach to vocational counseling in ghetto high schools, development and evaluation of experimental manpower training for the blind, assessment of manpower training in reform schools, projections of the Houston labor force, and several projects related to the labor market and technical and vocational education in Latin America. This does not include individual papers given by a growing number of staff members.

8. Finally, all of the above efforts have aided in achieving a consensus for development of an interdisciplinary curriculum in the human resource area. Despite the lack of interest of the Economics Department in labor-manpower economics, some student theses have been developed in the manpower area in economics, but many more in psychology, behavioral management science, etc. Also, the Center has been able to develop assistantships and other employment for approximately 25 students during the past three years. Thus, the current plan of the College is to develop a teaching capacity within the Center for the purpose of developing a human

resource oriented degree.

9. Lastly, all of the above efforts have developed a broad base of community support. Consequently, the Center received a line item in the University budget effective last September in the amount of $80,000. Thus, we believe that the development of a permanent manpower and human resource related program has been achieved.

In order to relate the experience of the Center for Human Resources at the University of Houston to that of other emerging interdisciplinary centers, a survey of 90 centers at 63 North American colleges and universities was made by the Center in 1968. The data contained in Tables 8 through 17 indicate a pattern which is rather consistent with the experience at the University of Houston and the trend of the development of manpower and human resource programs at universities and colleges in recent years.[25]

For example, it is clear that the trend is to combine a number of fields of study rather than to focus narrowly on one. Thus, of the total programs, only 16.6% were related only to the urban area and less than 15% related only to industrial relations. On the other hand, more than 50% of the programs related to industrial relations and to human resources while slightly more than 40% related to manpower compared with just under 40% for the urban field.

The programs tend to combine several main activities rather than to concentrate on only one. Thus, less than 10% of the programs engage only in

---

[25]The list of colleges and programs, as well as the survey questionnaire, is contained in the Appendix. Also, the writer wishes to express his appreciation to Miss Jane Hingle of the Center staff for her background analysis of the data contained in Tables 8-17 as well as her analysis of the data contained in The Manpower Institutional Research Grant Program.

Table 3

Major fields of study within interdisciplinary programs at North American colleges and universities

Fields emphasized	Number	Percent
Industrial relations, human resources, manpower, and urban studies	7	7.79
Industrial relations, human resources, and manpower	18	20.00
Human resources, manpower, and urban studies	3	3.33
Industrial relations, human resources, and urban studies	5	5.55
Human resources and urban studies	5	5.55
Industrial relations and manpower	2	2.22
Industrial relations and human resources	2	2.22
Human resources and manpower	4	4.44
Industrial relations only	13	14.45
Manpower only	3	3.33
Human resources only	3	3.33
Urban studies only	15	16.68
Other fields of study only	10	11.11
Total	90	100.00

Table 9

Main activities of interdisciplinary programs
at North American colleges and universities

Activity	Number	Percent
Degree, credit courses, extension services, and research	11	12.22
Credit courses, extension services, and research	20	22.22
Degree, extension services, and research	2	2.22
Degree, credit courses, and extension services	5	5.55
Extension services and research	26	28.90
Degree and credit courses	3	3.33
Credit courses and research	1	1.11
Credit courses and extension services	3	3.33
Extension services only	11	12.22
Research only	8	8.90
Total	90	100.00

Table 10

Graduate and undergraduate degree programs
at North American colleges and universities

Degree programs	Number	Percent
Graduate and undergraduate	3	14.28
Graduate only	11	52.38
Undergraduate only	7	33.34
Total	21*	100.00

* 21 of the 90 persons surveyed reported degree programs.

Table 11

Extension services conducted by interdisciplinary programs at North American colleges and universities

Services	Number	Percent
Noncredit, workshops and conferences, technical assistance, and demonstration programs	20	27.40
Workshops and conferences, technical assistance, and demonstration programs	5	6.85
Noncredit courses, workshops and conferences, and technical assistance	7	9.58
Noncredit courses, workshops and conferences, and demonstration programs	1	1.37
Noncredit courses, workshops and conferences	6	8.22
Workshops and conferences, technical assistance	9	12.33
Workshops and conferences, demonstration programs	2	2.74
Technical assistance, demonstration programs	1	1.37
Workshops and conferences only	16	21.92
Noncredit courses only	2	2.74
Technical assistance only	2	2.74
Other activities only	2	2.74
Total	73*	100.00

* 73 of the 90 programs surveyed reported extension services.

Table 12

Affiliation of interdisciplinary programs
at North American colleges and universities*

Affiliation of the program	Number	Percent**
College of Arts and Science	8	9.30
School of Social Science	8	9.30
Graduate school	11	12.79
School of Business	11	12.79
Graduate School of Business	10	11.63
University Extension	12	13.95
Interdisciplinary group	20	23.26
Not affiliated	16	18.60
Other	11	12.79

* 86 of the 90 programs surveyed answered this question.

** Total equals more than 100% because several programs claim multiple affiliation.

Table 13

Organizational unit of interdisciplinary programs
at North American colleges and universities

Organizational	Number	Percent
School	6	7.41
Division	13	16.05
Department	19	23.45
Part of a department	10	12.35
Independent center	24	29.63
Interdisciplinary program	2	2.47
Other	7	8.64
Total	81*	100.00

* 81 of the 90 programs surveyed answered this question.

Table 14

Status of the Directors of interdisciplinary programs at North American colleges and universities

Status of the Directors	Number	Percent
Dean	12	15.19
Division Head	15	18.99
Between Division and Department Head	6	7.59
Department Head	27	34.18
Below Department Head	11	13.92
Other	8	10.13
Total	79*	100.00

* 79 of the 90 programs surveyed answered this question.

Table 15

Officer reported to by interdisciplinary programs at North American colleges and universities*

Officer reporting to	Number	Percent**
Executive Officer	40	48.78
President	10	12.20
Academic Vice President	15	18.29
Other	15	18.29
Dean	40	48.78
Interdisciplinary Committee	10	12.20
Chairman	4	4.88
Other	3	3.66

* 82 of the 90 programs surveyed answered this question.

** Total equals more than 100% because several gave multiple answers.

Table 16

Staffing arrangements of interdisciplinary programs at North American colleges and universities*

Staffing arrangements	Number	Percent**
Own full-time faculty and staff	62	74.70
Joint appointment in two departments	32	38.55
Members of other departments assigned permanently	1	1.20
Members of other departments assigned part-time	22	26.51
Purchase of part of time of university faculty and other specialists through federal grants	25	30.12
Outside specialists engaged part time	37	44.58
Other	14	7.14

* 83 of the 90 programs surveyed answered this question.

** Total equals greater than 100% because many programs reported multiple staffing arrangements.

Table 17

Financial support for interdisciplinary programs
at North American colleges and universities

Source of financial support	Number	Percent
University, federal and foundations	24	29.26
University and federal	12	14.63
University and foundations	3	3.66
Federal and foundations	2	2.44
University only	28	34.15
Federal only	6	7.32
Foundations only	3	3.66
Other sources only	4	4.88
Total	82*	100.00

* 82 of the 90 programs surveyed answered this question.

research and only 12% solely in extension activities. As expected, the greatest concentration was in extension activities with approximately 87% of the programs represented. This is greater than is true of industrial relations programs in the Rezler study. Not unexpectedly, more than 75% engage in research and almost 50% offer credit courses. Also, despite the hybrid quality of some of the programs, approximately 25% of the programs offer degrees. In terms of the degree programs, more than 50% are graduate only and one-third are undergraduate only. The most common trend in extension activities is to combine all four of the major activities of workshop/conferences, technical assistance, noncredit courses, and demonstration projects. More than 27% of the programs combine all four. However, more than 90% engage in workshop/conference activities, followed by 60% in technical assistance, 50% in noncredit courses, and 40% in demonstration projects.

When the affiliation of the emerging interdisciplinary programs is considered, it is clear that there is a greater amount of independence than is true under industrial relations centers. For example, a total of 40% of the programs are either affiliated only with an interdisciplinary group or have no affiliation at all. As with industrial relations programs, a larger percent is affiliated with the business school and the graduate school, including the graduate school of business. However, 14% of the programs are affiliated with the extension division of the university.

In terms of the organizational structure, 30% of the programs are independent centers and approximately 24% have departmental status. It is important to note, however, that 16% have divisional status and more than 7% are schools. In keeping with this organizational structure, almost 42%

of the directors have a status higher than that of department head with 15% having the status of dean. Thirty-four percent have department head status and virtually none have a lesser status. Given the status of the directors, it is not surprising that 49% report to an official higher than the dean's level and another 49% report to a dean.

Finally, in terms of staffing, 75% of the programs have their own full-time faculty and staff while 39% have faculty with joint appointments in the program and a department. Thirty percent of the programs purchase time of the faculty and 45% hire outside specialists as needed. Most directly related to staffing is the financial arrangement used by the program. Not unexpectedly, 19% receive no university funds, relying entirely upon outside funds for survival, while another 47% combine outside with university funds. Thus, 34% use only university funds and these tend to be concentrated in industrial relations programs at larger universities.

Summary

From the foregoing discussion, the patterns used by the three types of influence in order to develop manpower and human resource programs are relatively clear. First, the industrial relations center tended to be discipline oriented, operating largely with university funds and with a heavy emphasis on curriculum and research. Extension activities, generally in the form of labor and management education, often were added and outside funds became more important after the program was firmly established.

Under the Department of Labor program, outside money was often the first money and, somewhat similar to industrial relations programs, tended to concentrate on research and the development of curriculum. However, there

was some emphasis on dissemination of information and extension activities. A major objective was to use the grant as seed money for additional research efforts. In some cases, the seed money also has aided in the development of extension type programs.

While the third stream of development utilizes both the industrial relations structural approach and the outside seed money approach of the manpower research grant program, it approaches from a different perspective and direction. It is primarily problem and action oriented rather than discipline and theoretically oriented. It is motivated by a social responsibility of the university and a desire to contribute to program development and policy in the short-run as much if not more than in the long-run. Lacking both university funds and specifically earmarked outside funds to develop curriculum and research, it begins with a problem-solving stance generally related to community extension services. Regardless of the type of activity in which it originally engages, it attempts to use it as seed money and to build a base of support so that it can move backward to the point from which the industrial relations centers and the manpower research programs start. It is quite clear that many universities and colleges have succeeded in this objective and have backed into a permanent and/or human resources program which includes a heavy emphasis on research and curriculum development.

APPENDIX A

Interdisciplinary programs in North American colleges and universities surveyed by the Center for Human Resources
University of Houston, 1968

University of Arizona
- Institute of Industrial and Labor Relations

Arizona State University
- Bureau of Business and Economic Research

Boston University
- Human Relations Center

Brandeis University
- Heller Graduate School

University of Bridgeport
- Center for Urban Studies

University of British Columbia
- Institute of Industrial Relations

University of California (Berkeley)
- Institute of Industrial Relations

University of Chicago
- School of Social Service Administration, Social Service Center
- Center for Urban Studies
- Committee on Human Development

Columbia University
- Conservation of Human Resources Project

University of Connecticut
- Labor Education Center
- Institute of Urban Research
- Center for Real Estate and Urban Economic Studies

Cornell University
- School of Industrial and Labor Relations

University of Delaware
- Division of Urban Affairs

Florida State University
- Institute for Social Research

University of Georgia
- Employee Relations Institute
- Institute of Community and Area Development
- Center for Continuing Education

Harvard University
- Joint Center

University of Hawaii
- Industrial Relations Center

Howard University
- Center for Mental Health & Institute for Youth Studies

Ibero-Americana University
- Escuela de Relaciones Industriales

University of Illinois
- Institute of Labor and Industrial Relations

Indiana University
- Labor Education and Research Center
- Institute for Applied Urban Economics

Iowa State University
- Industrial Relations Center

University of Iowa
- Center for Labor and Management
- Institute of Public Affairs
- Graduate Program in Urban and Regional Planning

Kalamazoo College
- Center for Management Studies

University of Kansas
- Center for Regional Studies

Université Laval
- Department of Industrial Relations
- Superieur Institute of Human Sciences

Loyola University - Chicago
- Institute for Industrial Relations

Loyola University - Los Angeles
- Institute for Industrial Relations

Loyola University - New Orleans
- Institute of Human Relations

University of Maine
Bureau of Labor Education

Marquette University
Division of Continuing Education
Department of Industrial Management

Massachusetts Institute of Technology
Industrial Relations Section

University of Massachusetts
Labor Relations and Research Center

University of Michigan
Institute of Labor and Industrial Relations
Center for Research of the Utilization of Scientific Knowledge
Institute for Social Research
Environmental Simulation Laboratory

Michigan State University
School of Labor and Industrial Relations
Social Science Research Bureau

University of Minnesota
Department of Industrial Relations, Industrial Relations Center

Université de Montreal
Department of Industrial Relations

New School for Social Research
Center for NYC Affairs

City University of New York
Health Services Mobilization Study
Public Service Career Training Program

New York University
Institute for Labor Relations
Center for the Study of the Unemployed

University of North Carolina
Institute of Government
Center for Urban and Regional Studies

Northeastern University
Economics Department

Ohio State University
Labor Education and Research Services
Center for Human Resource Research

University of Oklahoma
Multi-Purpose Training Center

Pennsylvania State University
Department of Labor Studies
Institute for Research on Human Resources

Princeton University
Industrial Relations Section

Queen's University
Industrial Relations Centre

The State University of Rutgers
Urban Studies Center
Institute of Management and Labor Relations

St. Francis College (Pa.)
Graduate Program in Industrial Relations

St. Joseph's College (Pa.)
Institute for Industrial Relations

San Diego State College
Institute of Labor Economics

San Jose State College
Institute of Industrial Relations

Simon Fraser University
Human Resources Research Center

Stanford University
Institute of Political Studies

University of Toronto
Centre for Industrial Relations

University of Utah
Institute of Industrial Relations

Virginia Polytechnic Institute
Labor Education Program

Washington University
Social Science Institute
Institute for Urban and Regional Studies

Wayne State University
Institute for Labor and Industrial Relations
Center for Urban Studies
Sheltered Workshop Training Program

University of West Virginia
Industrial Relations Program
Institute for Labor Studies and Manpower Development

University of Wisconsin
Industrial Relations Research Institute
School for Workers
Center for the Study of Productivity Motivation

University of Wisconsin - Milwaukee
Department of Urban Affairs

Yale University
Economic Growth Center

APPENDIX B

INQUIRY CONCERNING PROGRAMS (CENTERS, INSTITUTES, ETC.) RELATING TO HUMAN RESOURCES

NAME OF PROGRAM, CENTER, DEPT.: _____

_____

ADDRESS: _____

_____

_____ Zip _____

DIRECTOR: _____ TITLE: _____

INSTRUCTIONS:

In completing this questionnaire, please check (X) ALL topics that apply to your program and fill in specific information when requested.

I. DISCIPLINE, FIELD OF STUDY, AREA OF CONCERN OF PROGRAM:

A. ___ Industrial Relations

B. ___ Human Resources

C. ___ Manpower

D. ___ Urban Studies

E. ___ Other (specify): _____

II. MAIN ACTIVITIES OF PROGRAM (CENTER, INSTITUTE, ETC.):

A. ___ DEGREE PROGRAM

1. ___ Graduate program ONLY. Degree(s) conferred: _____

_____

2. ___ Undergraduate program ONLY. Degree(s) conferred: _____

_____

II. (cont'd)

3. ___ BOTH graduate and undergraduate programs. Degrees conferred:_____

B. ___ CREDIT COURSES TOWARD DEGREE(S) GRANTED BY OTHER DEPARTMENTS (Please give details, or include descriptive information)

_____

_____

C. ___ NONDEGREE EDUCATIONAL SERVICES PROVIDED (Check ALL that apply)

1. TYPE of service

a. ___ Noncredit course

b. ___ Workshops, seminars

c. ___ Conferences

d. ___ Technical assistance offered

e. ___ Demonstration projects

f. ___ Other service (specify): _____

2. TYPE of participant

a. ___ University students

b. ___ Private, nonprofit social welfare groups

c. ___ Public agencies

d. ___ Labor groups

e. ___ Employer groups

f. ___ Educational groups (teachers, administrators, etc.)

g. ___ Other participants (specify): _____

D. ___ RESEARCH ONLY

III. ORGANIZATIONAL UNIT PROGRAM FULFILLS WITHIN THE UNIVERSITY

A. ___ School

B. ___ Division

III. (Cont'd)

C. ___ Department

D. ___ Part of department

E. ___ Other unit (specify): _____

IV. ORGANIZATIONAL STATUS OF DIRECTOR

A. ___ Dean

B. ___ Division head

C. ___ Between division head and department head

D. ___ Department head

E. ___ Below department head

F. ___ Other (specify): _____

V. AFFILIATION OF PROGRAM

A. ___ College of arts and sciences

B. ___ School of social sciences

C. ___ Graduate school

D. ___ School of business administration

E. ___ Graduate school of business

F. ___ University extension

G. ___ Interdisciplinary group (specify): _____

H. ___ Not affiliated

I. ___ Other (specify): _____

VI. UNIVERSITY OFFICER TO WHOM DIRECTOR REPORTS

A. ___ Executive officers

1. ___ President

VI. (Cont'd)

2. ___ Academic vice president

3. ___ Other executive officer (specify title): _____

B. ___ Dean (of which school? please specify): _____

C. ___ Interdisciplinary committee (specify title): _____

D. ___ Chairman (specify title): _____

E. ___ Other (specify): _____

VII. STAFFING ARRANGEMENTS OF PROGRAM

A. ___ Own full-time faculty and staff (specify): _____

_____

B. ___ Joint appointment in two departments

C. ___ Members of other departments assigned permanently

D. ___ Members of other departments assigned part-time

E. ___ Purchase of part of time of university faculty and other specialists through federal grants

F. ___ Outside specialists engaged part-time

G. ___ Other (specify): _____

VIII. FINANCIAL SUPPORT OF PROGRAM, CENTER, INSTITUTE

A. ___ Own staff paid entirely with: ...1. ___ University funds

2. ___ Federal funds

3. ___ Foundation funds

B. ___ Own staff paid partly with: ...1. ___ University funds

2. ___ Federal funds

3. ___ Foundation funds

C. ___ Other funding arrangement (specify): _____

_____

IX. OTHER CENTERS, INSTITUTES ON CAMPUS WHICH TREAT TOPICS RELATED TO HUMAN RESOURCES, URBAN STUDIES, MANPOWER

	NAME OF INSTITUTE, CENTER, ETC.	ADDRESS	DIRECTOR
A.			
B.			

Thank you for participating in our survey. We would appreciate your including with the completed questionnaire any reports, brochures, catalogs, which describe your program. We have enclosed a return envelope for your convenience.

University of Houston
J. Earl Williams
5-68

MAJOR REFERENCES

Derber, Milton. Research in Labor Problems in the United States. New York: Random House, 1967.

Manpower Administration. The Manpower Research Institutional Grant Program: The First Three Years, 1966-1969. Washington, D.C.: U.S. Department of Labor, Office of Manpower Research, 1969.

Proceedings, The Role of Industrial Relations Centers, Regional Meeting of The International Industrial Relations Association, Chicago, Illinois, May 17-18, 1968. Reproduced at The Industrial Relations Research Institute, The University of Wisconsin, August 1968.

Rezler, Julius. "The Place of the Industrial Relations Program in the Organizational Structure of the University," reprint series of Institute of Industrial Relations, Loyola University, Chicago. Reprinted from Industrial and Labor Relations Review, Vol. 21, No. 2, January 1968.

Tripp, L. Reed. "The Industrial Relations Discipline in American Universities," Reprint Series No. 51 of the Industrial Relations Research Center of The University of Wisconsin. Reprinted from Industrial and Labor Relations Review, Vol. 17, No. 4, July 1964.

Williams, J. Earl. "Human Resources and the Business College: The University of Houston Example," American Association of Collegiate Schools of Business Bulletin, Vol. 5, No. 3, April 1969.

Williams, J. Earl. "The Role of the University in Urban Affairs," Proceedings, Conference entitled "The University and Urban Affairs," Astroworld Hotel, Houston, Texas, October 30, 1969.

Chapter 7

Longitudinal Studies of Labor Market Behavior

Herbert S. Parnes

Since mid-1965, the Center for Human Resource Research of the Ohio State University, in cooperation with the United States Bureau of the Census, has been conducting a series of longitudinal studies of labor market behavior under contract with the Manpower Administration of the U.S. Department of Labor. While from one point of view we have been involved in this project for quite some time, from the standpoint of its ultimate objectives the research has just got under way. The firmest conclusion to which I have personally come on the basis of experience thus far is that longitudinal studies should be begun in one's youth rather than in middle age! In any case, what I propose to do here is simply make a progress report on our efforts thus far. I should like first to tell you something about the nature of the study; second, to explore with you very briefly some of the

---

Herbert S. Parnes is Project Director for Longitudinal Studies for the Department of Labor and Professor of Economics at Ohio State University in Columbus, Ohio.

methodological problems that we face; and third, to illustrate some of the preliminary findings.

NATURE AND OBJECTIVES OF STUDY

Design

We are studying four population groups: men who in 1966 were between the ages of 45 and 59 years of age, women 30 to 44 years of age, young men 14 to 24, and young women 14 to 24. For each of these cohorts a national probability sample of 5,000 individuals representing the total noninstitutional civilian population has been drawn by the Bureau of the Census using techniques similar to those used for drawing the sample for the Current Population Survey. In each sample, however, blacks[1] have been overrepresented relative to whites in a 3-to-1 ratio, so that within each group we have approximately 3,500 whites and 1,500 blacks--enough of the latter to permit statistically reliable estimates.

For each of these population groups we are contemplating the collection of a five-year history by means of periodic interviews conducted by the Census Bureau. In the case of the young men and women the interviews are conducted annually. In the case of the older groups, however, cost considerations have dictated using biennial surveys. To give you some notion of our work schedule, the first interview of the older group of men was conducted in mid-1966, and the sixth and last survey will be conducted in mid-1971. In the case of the young girls--which was the last one that we

---

[1]Throughout this report I use the term "blacks" to refer to all non-Caucasians combined.

started--the initial interview was conducted in the early part of 1968 and the final one will be in early 1973.

Research Objectives

What about the objectives of the research? In the broadest possible terms, our interest is in explaining labor market behavior. More specifically, we are concerned with the determinants of such aspects of pre-labor market and labor market experience as (1) educational and occupational aspirations, (2) educational achievement, (3) labor force participation, (4) unemployment, and (5) mobility. This last topic is broad enough to encompass virtually all interesting types of labor market transactions. It includes, for instance, such questions as: What determines the willingness or the probabilities of individuals changing their employers or of making geographic moves? What determines the probabilities of individuals making occupational changes? What factors differentiate between individuals who move up the occupational ladder over a five-year period and those who either remain at the same level or slip down?

While in a general sense the objectives of all four studies focus on processes of these kinds, the specific research questions and hypotheses, of course, vary to some extent from study to study. For instance, in the case of the older men we are very much interested in the retirement decision. A specific objective in this connection is to explain the declining labor force participation rate of black men in this age category over the past decade. Alternative explanations for this phenomenon have substantially different policy implications. If it is a matter of labor market discouragement resulting from declining job opportunities for middle-aged black men,

there is one set of implications. If, on the other hand, it is a matter of differing reactions of blacks and whites to rising incomes, there is another set of implications. In the case of the women we wish to explore the problems that accompany re-entry into the labor force by women whose children have either grown or at least reached school age. In the case of the two groups of youth, we focus especially on the process of occupational choice and the problems of transition from school to work.

Conceptual Framework

In pursuing these objectives, we are committed to a multi-disciplinary research framework in the conviction that only through such a framework can we hope to be successful in identifying all of the sources of variation in these several dimensions of labor market behavior. Let me outline in very simple terms the basic structure of this framework.

What happens to an individual in the labor market is essentially a product of the interaction between his relevant characteristics and the relevant characteristics of the labor market. Consequently, for developing any kind of model, one needs to specify what these relevant characteristics are. Let me illustrate by reference to the question: What determines duration of unemployment? That is, once an individual becomes unemployed, what are the factors that determine how long he will remain out of work? Among the relevant characteristics of the individual there are, first of all, those that determine his attractiveness to an employer: his education, his skills, his health, his physical fitness, his color (unfortunately), his initiative, his appearance, his age. Some of these are functional and some are nonfunctional, but there is reason to believe that all of them are, at

least on occasion, taken into account by employers. One would expect, therefore, some relationship between these characteristics and the extent of an individual's unemployment experience.

Secondly, there is a complex of characteristics that determine the range of employers to whose attention the individual will come: the extent of his labor market knowledge and information, the vigor of his job search, his willingness to broaden his search outside his area of residence and outside the confines of his customary occupation. Third, the individual's hierarchy of preferences for different kinds of work and different types of economic and noneconomic rewards affects the kinds of work for which he will look and the range of specific jobs he will consider. Another set of characteristics which influence the duration of an individual's unemployment once he becomes unemployed are his economic circumstances, which in effect determine his staying power. These include the extent of his nonlabor income, his assets, and his obligations. Other things being equal, for instance, a man with six children is not going to be as finicky about the kinds of work he is willing to take as a man with no children. Consequently, other things being equal, one might predict that the latter individual might wish to look longer and thus to remain unemployed longer.

Turning now to the environmental factors that are likely to influence duration of unemployment, the level of economic activity is perhaps the most obvious. Other things being equal, the duration of unemployment is going to be longer in a loose labor market than in a tight one. The occupational structure of the labor market relative to the individual's skills and his education is another factor that will affect the duration of unemployment. Finally, a host of policies of employers, of unions, and of government will

be relevant. Whether or not employers discriminate on the basis of age, sex, or race clearly will influence the relative duration of unemployment of young people versus old people, men versus women, blacks versus whites. To take one other example, the characteristics of an unemployment compensation program in a state influence the staying power of an unemployed individual and can thus determine or affect the duration of unemployment.

It probably goes without saying that in our research we are not able to measure all of the types of characteristics I have referred to above. But I thould like to be bold enough to suggest that we are probably measuring more than have ever been measured in a national sample that collects complete work histories. Let me turn now to the kinds of variables that are included.

Dependent Variables

Among the dependent variables, we have measures of labor force participation which include not only the conventional current labor force status, but also a measure of weeks in the labor force during the period of a year. This means, incidentally, that over the five-year period we will have a measure for each individual that tells us how many weeks out of the 260 he was in the labor force. For the women, we have a life-time measure: the number of years between leaving school and first marriage, between marriage and first child, and since first child that the woman was in the labor force for more than 50 percent of the time. Finally, as a measure of the intensity of participation, we use number of hours worked per week.

For unemployment, a second major dependent variable, we have the conventional measure of status during the survey week, as well as the measure of weeks unemployed during the 12-month period preceding each survey, which again means that over the course of the study we shall have a complete

five-year record of the unemployment experience of each respondent. There are a number of employment characteristics for those currently employed: occupation, industry, length of service in current job, hourly rate of pay, hours worked, union membership, and degree of satisfaction on the job.

A fourth set of dependent variables relate to mobility. For instance, in the case of the older men we compare the first job after leaving school with longest job of career and with current job. In each case we record whether it was for the same employer or different employer, whether it was in the same or different occupation, whether it was in the same or different industry, and whether it was in the same or different geographic area. Moreover, as the study moves along, we will have mobility measures within the five-year period. In other words, each year we will collect a complete work record which will permit us, first of all, to compare the individual's employment status in year x with his employment status in year x-1; but secondly, it will permit us actually to count the number of changes that have occurred during the 12-month period preceding each survey. Finally, we have a measure of mobility as propensity to move. We posed the following hypothetical question: "Suppose someone in this area offered you a job in the same line of work you're in now. How much would the new job have to pay for you to be willing to take it?" We relate each individual's response to his current wage rate, and thus derive a measure of his relative attachment to his present employer or, conversely, his willingness to change jobs if he perceives an economic advantage in doing so.

Explanatory Variables

Among the explanatory variables in the studies are a number which relate to what might be called the formative influences on the individual; for

instance, his residence at age 15 (rural, urban, small town, big city), his father's education and his father's occupation at the time the respondent was 15, and family structure when the respondent was 15. A second set of variables relate to the individual's skills, including number of years of education and amount and types of training outside the formal school system. A third set of variables measure health and physical condition. Respondents are asked to compare their health with other persons of their age (excellent, good, fair, or poor) and are also asked whether they have any conditions which either prevent work or affect the amount or kind of work they can do. Fourth, we have rather crude measures of labor market information, which in the case of the young men and women are based on the extent of knowledge about the content of various types of occupations, and about the education and relative wage rate associated with each. Fifth, we have marital and familial characteristics. These, of course, include marital status and number and age structure of children; but in addition, for each respondent in all of these studies, we have information regarding the work activity of every other member of the family. This information is limited, to be sure, but it indicates whether or not each family member worked during the preceding 12 months and, if so, how many weeks, how many hours per week, and at what occupation. Sixth, we have very complete financial characteristics. Both income and assets are broken down by very detailed categories.

Finally, we have a number of attitudinal variables which I'll simply mention briefly at this point because I plan to refer to these in connection with some of our findings a little bit later. We have one which we call "commitment to work." It is the response to the following question: "If by some chance, you were to get enough money to live comfortably without

working, do you think that you would work anyway?" Individuals are classified according to whether or not they would continue to work. We also have a variable which we call work motivation based on the response to the following: "What would you say is the more important thing about any job--good wages or liking the kind of work you are doing?" Third, we have a kind of measure of alienation based on an abbreviated version of the Rotter internal-external scale. Fourth, there are measures of job satisfaction which simply record how well the individual says he likes his job, and also the factors he likes best and those he likes least about it. We intend to develop additional attitudinal measures before the studies end. At the moment, we are experimenting with questions which will attempt to measure a respondent's perception of discrimination in the labor market on the basis of color, sex, and age. These will permit the testing of some very interesting hypotheses; for example, that the perception of discrimination affects an individual's search for work.

In addition to the variables that are common to all of the four surveys, there are some that are peculiar to one or perhaps two of the age-sex categories. For instance, in the case of the young boys and girls, we are obtaining, through a supplementary survey of the high schools they attended, certain characteristics of the schools as well as the intelligence test scores of the respondents. These data will permit us to do some really pathbreaking analysis of the relative contributions of intelligence, quality of education, amount and kind of education, and socio-economic status to labor market success. For the older group of men, we have variables relating to retirement expectations; for women, we measure various attitudes that are presumably related to their labor force participation: for example, their

attitudes toward child care. We also, incidentally, have data on child-care arrangements and child-care costs.

SOME METHODOLOGICAL CONSIDERATIONS

The Nature of Longitudinal Analysis

Now let me turn to a brief discussion of some methodological questions and begin with an examination of the essential nature of a longitudinal study. Whether a study is longitudinal doesn't necessarily have anything to do with the way in which the data are collected, but rather has to do with the method of analysis. The essence of a longitudinal study is two fold: (1) it involves measurement or description of one or more characteristics of the same group of individuals at two or more points in time and (2) it involves analysis of relationships among the characteristics of these individuals at different times or of changes in one or more characteristics over time.

Thus, it is not the fact that we are interviewing our samples annually that makes our study longitudinal, for one could make a longitudinal analysis on the basis of a single survey if he were to collect historical data and were to relate the characteristics of a given group of individuals at one point in time to the characteristics of that same group at some different point in time. To be more specific, if one collects a five-year work history and relates the extent of unemployment in the first year of that five-year period with the extent of unemployment in the fifth year, he is making a longitudinal analysis. On the other hand, the mere fact that one collects data periodically from the same group of respondents does not insure a longitudinal analysis. If I collect data on unemployment

annually over a five-year period and then at the end of that period simply relate the total amount of unemployment experienced by individuals to their characteristics at the end of the period, this is not a longitudinal analysis.

Now, despite the fact that longitudinal analysis does not require periodic surveys, it is advantageous in a study covering a five-year period to collect data periodically for at least three reasons: (1) Certain types of variables that are important in longitudinal analysis cannot be collected in any other way--for instance, attitudinal measures. If I want to know the effect of job satisfaction currently on whether a man changes jobs next year, it would be quite unsatisfactory to attempt to explore this matter retrospectively. (2) Periodic collection of the data has the very substantial advantage of minimizing the dangers of faculty recall. If we waited until the end of the five years to collect retrospective work histories, they would certainly not be as complete and as accurate as those resulting from annual interviews with the respondents. (3) Collecting the data annually permits certain methodological questions to be examined; for example, the extent of error introduced by faulty recall. If at the end of the five-year period we ask the person about his status in the initial year and then compare his retrospective response with what he originally reported we will be able to shed some light on this kind of question.

The Problem of Attrition

Whatever the advantages of periodic collection of data, there are certain problems inherent in this approach. One of these is the attrition of the sample over time. Thus far, our experience in this respect has been

nothing short of phenomenal. I can say this in all modesty because our remarkable success in this respect is attributable exclusively to the efforts of the Bureau of the Census, which has been responsible for the interviewing.

In the case of the men, the fourth survey was conducted in the middle of 1969. Of the original group interviewed, 5 percent have been lost by virtue of death. Of those who were still alive and who were eligible for interview, the attrition rate over that three-year period was only 8 percent. As might have been expected, the situation in the case of the boys has been not so favorable. We lost 13 percent into the Armed Services simply because we agreed that we were not going to follow young men who were inducted, but we hope to be able to interview these young men again when they come out. Aside from that loss, there has been an attrition of 10 percent over three years. Even counting those who have gone into the Armed Services as being lost to us, we still have in excess of 75 percent of the group with which we originally started. As I have said, we owe this record to the efforts of the Census Bureau. Some of their enumerators have displayed ingenuity remarkable to behold. As an example, one of them in the third survey of young men approached a youth in his twenties who refused to be interviewed. The interviewer drew herself up and said, "Now look, you had your chance to refuse last time and you didn't so now you've just got to go through with it." He did!

Response and Coding Errors

I'd like to mention problems of response and coding errors, which are particularly troublesome in a longitudinal analysis. The point may be made

quite simply. In a conventional cross-sectional study if there are response errors in reported wages that are randomly distributed, you get an average measure of wages which is unaffected by this random error in response. However, in a longitudinal study if you're interested in comparing wages in year x with wages in year $x+1$--both years having random response errors in wages--the random errors in each year will cause you to measure a much greater extent of change than actually exists. This is a problem that we suspect exists in the case of the wage rate variable, as well as in the occupational variable, and we're still in the process of worrying our way out of those problems.

SOME PRELIMINARY FINDINGS

A systematic review of our findings to date is not possible within the available time. Nevertheless, I should like at least to illustrate the kinds of evidence that have been yielded by referring to some of the differences we have observed between blacks and whites within each of the cohorts we are studying. Even a limited acquaintance with American society would lead one to expect substantial differences in the labor market experiences of whites and blacks. Nevertheless, the pervasiveness and magnitude of the differences are impressive. There are profound differences between the two color groups in educational attainment and in occupational distribution, with the blacks concentrated in the lower levels of the occupational hierarchy. Labor force participation is lower for blacks than for whites in the two male groups, but higher for blacks than for whites among both age groups of women. Blacks have considerably higher unemployment rates than whites and lower wage rates even when education and occupation

are controlled within broad limits. One exception to this generalization is among professional and technical women, in which case blacks have average hourly earnings that are higher than those of whites, presumably because they are better educated. A larger proportion of black than of white women in professional and technical occupations had four years of college and are in professional as distinguished from technical jobs. Secondly, among women in clerical occupations there is no intercolor wage differential. However, in every other occupational and/or educational category that we have been able to examine there are substantial wage differences between blacks and whites in favor of the latter.

These differences have been fairly well documented in other studies. Some of the more novel data from our study are those relating to work attitudes. You recall our measure of "commitment to work"--the response to the question of what the individual would do if he were somehow to acquire enough money to live comfortably without working. It is interesting to observe that among men the proportion of whites who say they would continue working is somewhat higher than the proportion of blacks (Table 1). However, when one controls for occupation, the difference tends either to disappear or to become much smaller. For instance, in the case of professional and technical workers, the percentage of blacks who would continue to work is actually higher than that of whites--91 percent compared with 86 percent. This is one difference which tends to wash out when you control for occupation and/or education. In the case of women, note that blacks have a higher commitment to work than whites by this measure and that this difference persists in every occupational category. It is interesting that this attitudinal measure yields intercolor differences that

Table 1

Commitment to work, by major occupation group and color: men 45-59 years of age (1966) and women 30-44 years of age (1967)

Major occupation group	Men				Women			
	Blacks		Whites		Blacks		Whites	
	Total number (thousands)	Percent with high commitment[a]	Total number (thousands)	Percent with high commitment[a]	Total number (thousands)	Percent with high commitment[a]	Total number (thousands)	Percent with high commitment[a]
Professional and technical	57	91	1,839	86				
Managers and proprietors (nonfarm)	55	81	2,280	81	147	76	1,457	74
Clerical	60	69	685	73				
Sales	19	--[b]	688	82	215	62	2,969	60
Blue collar	756	72	5,939	73	264	59	1,359	45
Service	182	66	657	72	592	70	1,151	54
Farmers and farm managers	135	83	1,104	89	34	84	181	57
Total or average	1,269	74	12,826	78	1,253	67	7,120	59

Source: National Longitudinal Surveys

[a]Those reporting they would continue to work even if they were to acquire enough money to live comfortably without working.

[b]Percentage not reported where base is fewer than 25 sample cases.

are consistent with the differences in actual labor force participation rates between white and black women.

Another work attitude is the response to the question: "What is more important to you about a job--liking the work or good wages?" In this case there is very substantial difference between whites and blacks. Among white men 19 percent say good wages; among blacks 48 percent give that answer. The same difference exists, although less pronounced, among the women. In the case of this variable the differences generally do not disappear when one controls for occupation. There is just one exception: the proportion is identical for both black and white professional women.

Next we have a measure of job satisfaction: "Would you say you like your present job very much, somewhat, dislike it somewhat, or dislike it very much?" We find higher satisfaction on the part of whites than of blacks in all three age-sex cohorts (Table 2). This, of course, is hardly surprising in view of the differences in occupational structure among them. The interesting point is that in the case of the older men the differences in satisfaction tend to melt away when occupation is controlled, but in the case of the boys they do not. The intercolor difference in the case of the younger men is considerably greater than in the case of the older group. I'm not sure of the reason for that, but the explanation may lie in Eldridge Cleaver's observation that the cleavage between the generations is even more pronounced than the interracial cleavage.[1] What I am suggesting is that the objective characteristics of the jobs of blacks in both age

---

[1]Eldridge Cleaver, Soul on Ice (New York: Dell Publishing Co., Inc. 1968), p. 67.

Table 2

Satisfaction with current job, by type of occupation and color: men 45-59 years of age (1966), young men 16-24 years of age (1966), and women 30-44 years of age (1967

Cohort and type of occupation	Blacks[a]		Whites	
	Total number (thousands)	Percent highly satisfied	Total number (thousands)	Percent highly satisfied
Men 45-59				
White collar	190	68	5,065	69
Blue collar	738	49	5,824	50
Total or average[b]	1,240	51	12,655	58
Women 30-44				
White collar	363	63	4,429	74
Blue collar	264	50	1,359	57
Total or average[b]	1,253	56	7,120	68
Young men 16-24[c]				
White collar	94	48	1,333	57
Blue collar	547	34	3,115	49
Total or average[b]	835	35	4,993	51

Source: National Longitudinal Surveys

[a]Negroes and other races.

[b]Includes service and farm workers not shown separately.

[c]Excludes those enrolled in school.

groups are less satisfactory than those of the whites, and that young blacks may be considerably less willing than older ones to accept these differences without complaint.

One final attitudinal variable that I should like to call to your attention is our measure of prospective mobility. I referred earlier to the question which asks respondents whether they would accept another job doing

the same kind of work for another employer and if so how much it would have to pay. If we take those who respond that they would not take such a job at any conceivable rate of pay, we find that they constitute 44 percent of the white men and 38 percent of the black men and that the intercolor difference is in the same direction among the other cohorts. In other words, among the men, boys, and women alike the whites are somewhat less mobile by this measure; that is, somewhat less willing to accept another job at higher wages than are the blacks.

Now let me simply conclude with the following observation. When one talks about intercolor differences in labor market behavior or experience he is clearly not attributing differences to skin color per se. I have noted that many of the observed differences either diminish substantially or completely disappear when education or occupation is controlled. To this extent, of course, there is no true intercolor difference; what appears as an intercolor difference in the gross data is simply a reflection of differences in occupational structure or educational structure between whites and blacks. On the other hand, there are some variables in which the intercolor differences do not disappear--wages, for example. There are several possible explanations. One is that our measures of occupational and educational attainment are not sufficiently refined. For example, in the tabular data shown in Table 1, we are using very broad occupational categories as controls, and there is considerable intercolor difference within such categories. A second possibility is that the education of blacks is qualitatively inferior to that of whites, so that controlling for number of years of schooling does not really standardize the two groups with respect to education. Third, there may be cultural differences between whites and

blacks that have an effect on job performance or job attitudes that is independent of occupation or education. A final possibility, and the most obvious of all, is labor market discrimination, particularly if one is attempting to explain intercolor differences in a variable like wages or unemployment experience.

Now, from one point of view, I would argue that all but the first of these explanations reflect discrimination, but with different time perspectives. That is, to the extent that intercolor differences reflect differences in quality of education they result from discrimination in educational opportunity. To the extent that they reflect what I have called cultural differences, they reflect the deep-seated differences that extend historically from the institution of slavery and the pervasive discrimination that has characterized society since then. I don't know whether it will be possible in this research to go farther than simply to suggest some of these possibilities; that is, I don't know whether we will ultimately be able to disentangle the separate influences. One of the things that we do wish to do, however, is to go as far as possible in explaining differences between whites and blacks in the hope that we can uncover factors that can be attacked through policy measures.

As just one example of this, we have found substantial differences between white and black youth in the extent of their labor market information. Regardless whether we control for education, for socioeconomic status, or for age and experience, there turns out to be pronounced differences in how much black and white young men know about the world of work. Moreover, the degree of labor market information appears to be related to certain measures of labor market success--e.g., wage rate. Now, here is a

matter which obviously can be attacked through policy measures. These findings suggest that if something can be done to improve the amount of labor market information of black youngsters, this will help to alleviate some of the problems that are reflected in our data on the comparative labor market status of blacks and whites.

Chapter 8

Studying the Evolution of Performance

Arthur C. MacKinney

Since 1966 I've been director of a project which is concerned broadly with manager performance, manager development, and the evolution of manager performance. This is a project funded by the Owens-Illinois Company of Toledo, Ohio, whose primary product is glass containers, although it is now a widely diversified organization that manufactures many other things in addition. That's kind of incidental at this point because I don't really want to concentrate on that organization or the results of the research so much as I want to concentrate on a discussion of a research strategy.

I think I will begin by stating flatly that I have two main research biases or prejudices and how these fit into this general topic of studying the evolution of performance. Incidently, although I'll be discussing managerial performance, the things I'll mention here are relevant to manpower

---

At the time that the paper was given, Arthur C. MacKinney was Professor of Psychology and Head of the Psychology Department at Iowa State University, Ames, Iowa.

research generally not just to research on managers. Certainly the choice of variables that we are studying is specifically germane to managerial performance, but the approach is general. My first research bias is this: Those of us who call ourselves behavioral scientists are perpetrating a minor fraud on society. We really ought to be calling ourselves stimulus scientists. We spend a great deal of our attention in behavioral science on stimuli and very little on behavior or performance, which is almost a contradiction of terms nevertheless true. You can say this another way. We put a lot of attention on independent variables, and not too much attention on dependent variables. We put a lot of attention on inputs and not too much attention on outputs. This has been the emphasis historically in behavioral science to the result that we really do not understand our dependent variables in applied behavioral research. That is a serious indictment; but I think it's a totally accurate and at least in my judgement, a fair criticism of behavioral science at large.

Another facet of this same criticism is that we have allowed dependent variables to be determined for us by the organizations we work for and in. In my days with the automobile industry I was what is laughingly called a researcher in that corporation, and the kinds of dependent variables that we used in our research were determined for us by the organization. They were not chosen on any scientific or theoretical basis. In my judgement we've sacrificed a great deal to the organization that pays the bill and, I think, to the detriment of the science as well as to the organizations that we work for. The research approach that I'm going to discuss is designed expressly to improve our understanding of one variety of complex human performance--the performance of industrial managers in a manufacturing operation.

The central point here regarding dependent variables is that if the dependent variable is chosen by the owner or the manager of the organization or if the researcher chooses the dependent variable because it's convenient, then what happens is severe constraint on the knowledge that is accrued and, in addition, on the integration of that knowledge with other knowledge. In industrial organizational science we don't understand how one dependent measure relates to another or even how one measure in one organization relates to the same one in another organization; so we can't generalize. When we can't generalize, of course, we're in trouble in science; and I think we must do something about this.

"I would like to say here parenthetically that when I use the term "dependent variable" I'm referring, in the traditional scientific sense, to the outcome variables or the performance variables that are dependent on the manipulations in the research.)

Okay, that's one prejudice--we don't really understand our dependent variables in applied behavioral science to the net effect that we have some severe constraints on our ability to generalize in science. The second prejudice is one which relates to research approach or methodology, and I'd like to discuss this business of approach in the context of causation. I want to discuss the determination of causation in scientific activity. Now, I think it's generally accepted that the key to understanding what causes what is a specification of time sequences--a specification of what event follows what event in time. If you can say that through replications A always follows B, then most people are willing to ascribe causation. Now, of course, that's an over simplified statement for several reasons, among them because it implies that one variable causes one variable; and if there's

anything we should have learned in this business by now, it is that causation is complex and that one-to-one causation typically isn't the case. I want to disclaim that. I'm not arguing for one variable-one variable linkages. I am arguing that the specification of time and order is important in determining causation. I think that it would also be widely agreed that there are two fundamental ways that we can determine causation in any scientific endeavor. One is the manipulated experiment; that is, the classical approach to research in which the independent variable is literally taken hold of physically and manipulated by the experimenter. Subsequently (note the time sequence) the experimenter observes what changes, if any, take place in the dependent variable. That's the classical physical science model of the experimental manipulation of independent observation and dependent variable. That's certainly okay in physical science, and it's great in some parts of behavioral science--the so-called experimental parts of our business. Their extensive use is made of manipulative kinds of experiments both in laboratories and field settings. I've done some work of that type in the laboratory but mainly in the field. My doctoral dissertation was a field experiment. It dealt with the assessment of the effectiveness of a training program on job performance--a manipulated or experimental study. I manipulated training experience and observed change in performance. That's one approach.

The other way is more germane in my judgement for industrial organizational science. Psychologists call this a longitudinal approach. The longitudinal approach allows you to study real organizations without manipulation and without changing things intentionally, but it still allows

you to make inferences about causation because you can specify time sequences.[1] Now, in my business we do this kind of longitudinal study by researching the same group of subjects repeatedly through time. We've added the time dimension. Most research in industrial-organizational psychology has been of the cross-sectional or single time slice variety. One of my associates uses the motion picture analogy. It is as if the life span of an individual is represented by a reel of motion picture film; and what we have done traditionally in behavioral science is clip a single frame which is conveniently located, study that single frame, and let it go at that. But more the logical thing to do, which I'm arguing here, is clip several frames, not together but separated, throughout the span of the reel itself, the life span in this case. The longitudinal approach that I'm arguing for studies the same group of subjects a number of times as their performance evolves or changes; hence, I think you begin to see the linkage to the choice of the title, "Studying the Evolution of Performance."

Both of these approaches--the experimental or the manipulative approach and the longitudinal or a cross-time approach--are difficult studies to do, particularly in organizational settings and, hence, we have had not very many of them. Field experiments are sufficiently rare so that when a good

---

[1] I admit to glossing over complexity in a most cavalier manner here. My excuse is the need for brevity. In general, the design of the research discussed here uses correlations between any two variables, each assessed repeatedly. This allows one to correlate X at Time 1 with Y at Time 2 and vice versa. A comparison of the two coefficients provides greater insight into causation since if the correlation of X at Time 1 with Y at Time 2 is significantly greater than that between Y at Time 1 and X at Time 2, then most investigators are willing to make a causation inference. This assumes that the influence of other variables is minimal. Note that confidence can be increased by replication at more than two times allowing for a greater number of across-time correlations.

series of field experiments comes along, it's noticeable. You can look, for example, at a very famous series of studies in General Electric by Herbert H. Meyer--a classic set of field experiments. Longitudinal studies, in addition, are sufficiently rare so they're noticeable. Some of the most famour are (1) managers at AT&T, (2) our research with Owens-Illinois, (3) a Sears-Roebuck study of execuetives, (4) some interest research taking place at the University of Minnesota, and (5) a project at the Michigan Institute for Social Research. You can see there are just a handful of these. The reason for this, of course, is that they're difficult and costly. Organizations resist going back again and again asking the same type of questions and collecting the same kind of data. Yet, that's literally what you have to do so I don't claim that it's easy. It's expensive, time consuming, frustrating, and requires careful public relations. It also requires continuous reassurance of the client organization and the subject to make sure they understand what you're doing and why. Nevertheless, I'm convinced that we must do these kinds of experimental manipulative studies on one hand and longitudinal cross-time studies on the other if we're going to get anywhere in organizational science. Now I say that because we have an enormous array of isolated tidbits of information in this field. Textbooks and journals in my field (or yours) have many pieces of information that are terribly disjointed and there is no conceptual net with which to tie them together. So I'm convinced, personally, that these two research prejudices or biases that I have mentioned, if put into effect, will help us to determine causation and will help us unravel this hodgepodge. I'm going to come back to this part of the subject again.

Let me put these two biases into a research context. First I'll give

you an overview of the study I've been doing since 1966; then I'll go into a little more detail--a more specific set of statements from different vantage points. I'm going to draw another analogy here by doing a "hat act"--changing hats and, hence, characters. I want to do this to describe the research that I'm involved in from the vantage point of different kinds of people. In general terms the research that I've been involved in is being carried out in three divisions of the Owens-Illinois Company's 24 plants and is concentrating on what we call our key-level managers--or second-level middle managers--all of whom supervise supervisors. For the purpose of this discussion, a manager is a manager who supervises supervisors. That's an arbitrary operational definition, but that's the one we have adopted for the purpose of the study.

We're gathering data from the following sources: the manager himself, his supervisor, and his subordinate supervisors. (The titles differ from plant to plant, but in terms of position on the organizational chart they're consistent.) So I covered three levels--self, supervisor, and subordinates. We had, of course, the other option of lateral or peer data but that turned out not to be an option because of time commitment and costs; hence, we have restricted ourselves to the three sources.

Our data are being gathered primarily by questionnaire. Some attention is being given to traditional organizational measures, although they are not the prime focus of the study. Thus, we are not directly concerned with them at this time; we're going to be more concerned with them later. The variables that we're studying are of a wide variety, and we're collecting data of three main classes. First we have the psychological variables, such as ability, interest, and personality tests. These data were collected at

the very outset of the study and will be collected again toward the end of the study. (The end of the study, by the way, is not yet determined. This is an open issue.) The second class includes the performance variables which are primarily of two types--ratings and satisfaction, attitudinal, or morale measures. Third, we have the environmental variables, such as the work style of the supervisory manager, job descriptive information, perceptions of the job, and measures designed to describe the situation that the manager works in. The focus or main interest of the study is on the latter two classes--the performance variables and the environmental variables. With that statement, let me return again to a general kind of descriptive statement about the project.

I've already told you that it's a longitudinal study. We're looking at variables as they evolve through time, and I've just mentioned that we're concentrating on performance and environment. Now with that information, I think you can infer that what we're doing here with this group of managers is looking at (1) the performance of the managers as it changes through time; and concurrently, we are looking at (2) environmental descriptions. So what we're getting at multiple points in time is performance and environmental data. Now I think you can see that the objective in the long term will be to associate environmental events and change in performance.

At this point we have come full circle and now we can talk about objectives. The thing that I'm really interested in is to be able to describe in a much more precise way than we've been able to in the past the kinds of experiences that managers must have in order to develop expertness or competence as managers. The way we're trying to do this is to look at change in performance as it is associated with environmental events. This is a

causation model. What I plan to do is to look at what kinds of job experiences are associated with effectiveness. This is being done in terms of the sequential or developmental view. Incidentally, this is an approach that, to my knowledge, was originated by the developmental psychologists for the purpose of studying psychomotor and psychological development in children; and organizational scientists began to apply this kind of approach to the study of the development of performance of people in organizations. This is exactly what's happening here.

At this point I'm going to take off the generalist's hat, and I'm going to put on another hat. I want to take a theoretical view of this kind of research. I want to discuss this as a project from the point of view of the theory-oriented scientist. Now I am sure that all of us learned at one time that sciences grow through the use of a network of concepts that we call a theory which is used to generate hypotheses. The theory suggests an empirical observation. The observation is then carried out, the outcome of that observation is compared to the theory, and the theory is modified or not required by the empirical observation. This represents an ideal, and this is again part of the scientific heritage that comes to us from the physical sciences. We also know that this isn't the way it usually happens. What usually happens is something far different from this classical physical science model. Certainly what's happened in industrial behavioral science or organizational science is far different. The situation is, we have amassed a tremendous amount of empirical data that didn't come out of any network of concepts or theory in the first place. They simply came out of our experience, our interests, our curiosity, or the needs of our organizations; but they didn't come out of an organized or coherent set of concepts.

The consequence is that we have the most unnerving hodgepodge of loose ends of information floating around that is imaginable. The reason I'm going through this exercise is that I think the theory-generation view is an important view of the kind of study that I'm doing. This study didn't grow out of an organized set of ideas. This study was motivated in part by the need to build theory. The study originated with the observation that there seemed to be a theme that ran through a number of different empirical observations. I'm not going to bother you with all of them, but I'd like to give you some examples that have been noted. We've had a notorious inability to predict managerial performance. In addition, there has been a well-known lack of reliability in manager performance measures. Also, there has been a most annoying decline in the validity of selection instruments with time. One very famous study done at Minnesota Mining looked at the degree of validity as a function of time between the assessment of the predictor and the on-the-job performance. As the time between the application of the predictor and the assessment of performance increased, there was a marked decline in the validity. This is simply another empirical datum. There are many of these. As a result, it occurred to me that maybe there was a theme that ties these together and that the concept that would explain this and all these other findings (there are about a dozen of them that I could recount) is that jobs aren't the same from time to time. Reflect on that simple-sounding statement for a minute. I know it sounds ridiculously simple to say the nature of performance isn't the same from one time to the next, but think about the implications of that. This says that a job at Time 1 isn't the same job at Time 2, even though it's the same person, the same organization, the same job description, the same colleagues, etc. It

says that most of our notions about training, development, and selection either have to be scrapped entirely or they have to be modified drastically. I think there are probably other implications of this notion, but the point is that we have tacitly assumed that a job is a job--it's a constant thing. This isn't so!

You can see that the notion of research as being generated out of a theory and testing that theory, doesn't hold in this case. What we have done is looked broadly through the body of knowledge, picked up a theme there, and then set out systematically to determine whether that is, in fact, a theme that relates a number of different findings. That's what I'm trying to do; it's just that simple. I'm trying to test the hypothesis that the nature of performance isn't the same from time to time--the job isn't the same from time to time. This, hopefully, is an example of an inductive (rather than a deductive) theory-generating process.

I'm going to throw that hat down and pick up another hat. This hat belongs to the researchers or students interested in leadership and in surveying the programs of leadership research since World War II. I think it's fair to say that if we're interested in studying leadership, we would review four different programs of research. First is the program of the Institute for Social Research at the University of Michigan--a very famous series of studies. Another is less well-known but in my judgement important nevertheless. It is the series of studies referred to as the USC Leadership Studies which took place in the late 1940's and early 1950's at the University of Southern California. Another famous program of leadership research would be the still accruing work of Fred Fiedler at the University of Illinois. Finally, you'd think of the famous Ohio State University

Leadership Studies. The reason I mentioned this is because the research strategy that I am discussing here is a direct outgrowth of the Ohio State studies. These studies began with the old trait approach, and they discovered that leadership was not simply a set of human traits. Outside of the fact that the leader had to be minimally bright, minimally articulate, and a few other minimal kinds of personal qualifications, there didn't seem to be anything in the list of personal traits that identified leadership success. So the shift, then, took place in the Ohio State studies from concentrating on traits to concentrating on interactions between people and situations and studying how you would describe the style of the manager among other things. The study that I've been discussing here is, in general terms, an extension of work at Ohio State that was begun during World War II by Bert, Harris, Hemphill, Stogdill, and Fleishman. We are now, in effect, taking the next logical step to getting more insight into the person-situation interaction and how it influences leader performance by, in our case, studying the evolution of that performance as the situation changes. They originated the notion of looking at the person-setting interaction. We're looking at that person-setting interaction as it evolves through time.

I want to shift hats again and take a statistical view of this kind of research. I'd like to consider for a moment what psychologists call reliability and validity, which I have already alluded to briefly. I disclaim being a statistician; and if I didn't have the privilege of working closely with one of the best statisticians I've ever known, Lee Wolins, I simply couldn't do research of this type. He's an excellent computer-liaison man, no mean mathematician, and also an excellent applied

statistician. I'm not any of those things, but I know just enough to comment about a couple of things that I regard as very important. The first one deals with the notion of reliability. Psychologists use reliability of measures to refer to accuracy or lack of error. In 1910, Spearman, the English statistician, talked about reliability. He started with a basic model. Spearman said the total amount of variance in any given measure is a function of the true individual differences plus error. Reasoning from this, he defined reliability as the ratio of the true to the total variance. As the error component goes to zero, the reliability approaches one or perfection--i.e., no error. This was 1910. But it has become painfully obvious over the years that this kind of simple model is not doing the job. There are at least two major reasons for this. One of the reasons is that this is a one factor model. This is saying that there is one major component in the individual differences that we measure. If you look at this in terms of job performance, you know that it isn't so. You can tell intuitively that there's more than one component in job performance. Something like overall effectiveness on the job may be a convenient way to talk but it sure does not allow for the facts. You know that job knowledge is an important component in performance and you know that interpersonal relations is another major component to name only two. If you were to apply Spearman's 1910 Model, you'd have to at least be concerned with these two components in performance--two true individual differences components. And we have to include an interaction component because obviously it wouldn't be safe to assume that these things were going to operate without influencing each other. Now this is a two factor model; look what happens if you add a third one. If you add a third factor, you immediately have to not only put in the

variance component for each main effect but you also have to add an interaction term for each pair of main components and other interaction terms for the second and higher order interactions. These models get complex very very rapidly; and, of course, nobody knows how many factors there are or how many sets of individual differences factors there are in each performance, particularly complex human performance such as managers exhibit. Now I want to complicate this still further by saying it is also quite likely--the evidence seems to indicate--that there is a time effect that cuts across all of this. Imagine now how complicated this thing is getting. We're to the point now where each individual difference component is interacting not only with everything else but also with time. In other words, it's changing across time. It's hard to imagine a model that's so complex that it's a study of, say, fifteen or twenty of these factors of performance--all of them interacting with every other one and all of them interacting with time. What business have we got thinking about measurement in the 1910 Spearman sense. I don't think we have any business at all! I think we've got to get over this ridiculous notion that we can deal with complex things in simplistic ways. Frankly, I think it's stupidity to think that we can continue to pretend to act as if this one factor approach to the study of performance is reasonable.

The same thing is true for the validity notion. Psychologists use the word validity to refer to the effectiveness of a predictor in predicting some performance measure, and it is usually expressed with a zero-order correlation coefficient. I'm suggesting that we can better do this multidimensionally, and we can do it repeatedly through time. Think back now, if you would, on the discussion of the research that I'm describing here,

and note that we're looking at performance through many dimensions and through time. So what this strongly suggests, of course, is some sort of factor analysis. Looking at the factors at Time 1, Time 2, Time 3, and so forth, how do they evolve through time? We have typically thought of the validity of predictors in terms of zero-order correlation coefficients. We have said that validity is the power of a predictor to predict some performance outcome expressed as a correlation coefficient. It seems that this is grossly over-simple. This associate I have referred to, Lee Wolins, has been doing studies making predictions using individual growth curves rather than simply using a zero-order correlation coefficient. He's looked at a variety of variables for an individual's performance across time. He finds, for example, that some people tend to grow or change in a nice, simple, straight-line manner while other people tend to have an accelerated growth function early that levels off later. Of course, you can begin to see that all kinds of growth functions are possible here. One of the interesting studies that Lee did was directed to the growth of intelligence in small children. He found that if he measured intelligence several times he can use the change function (i.e., the shape or form of the curve that describes the individual's growth) from these different times to predict where the child's going to end up. He gets higher validity by using change across several assessments than he can using traditional zero-order validity approaches. He has done this for a number of different settings--for intelligence growth among children and for learning in hamsters--and he's just beginning now to do it with our managers. He's finding that with few exceptions he increases the validity for whatever kind of measure he uses. For managers we've got all kinds of possibilities. We intend to do this sort of thing for a great

many measures, such as predicting target performance with performance change on the same variable during an earlier period. Let me be specific. Let's suppose, for example, that one of our factors is a technical knowledge of the operations of the job. We want to predict how the person will end up in terms of technical knowledge of the job after five or ten years on the job. We study gain in technical knowledge for an early period and look at the change function. Using change we predict where he will eventually end up.

There are a number of other things that I think reasonably could be discussed. For example, the results of this study have been fascinating so far and we have just barely scratched the surface. Let me close by recapping the main points that I have tried to emphasize in this discussion. First, I have offered my view that there are two exceedingly important but sadly neglected research approaches in manpower science which need greater emphasis. The first is the better understanding of our dependent variables--our performance outcome measures. The second is more attention to the longitudinal study as a means of specifying causation. I believe that these two approaches, if implemented on a wider scale, will greatly increase the payoffs inherent in our manpower studies. Second, I have described a research project, my own, which has attempted to implement these points of view. This project has been described from a number of different vantage points. The first might be considered that of the generalist, or a general view of the processes, setting, and variables being studied. The second might be considered that of the theoretician, or a view that stresses the inductive theory-generating objective of the study. The third might be considered that of the leadership researcher, or a leadership view of the

research. The final one might be considered that of the statistician, a view that stresses key statistical processes being stressed in this study. But overall, the aim of this paper has been to acquaint you with some different ways of thinking about and carrying out manpower research. I hope they will prove to be as useful to you as they have been to me.

Chapter 9

Social Science Research Centers in the 1970's: the Need for Relevance in Manpower and Industrial Relations Research

Herbert G. Heneman

Stripped of all claim to scientific understanding and objectivity, I can only offer my usual polemics--a disjointed, biased approach for purposes of raising discussion. At the outset, may I confess that I think that I may see what the basic problem is (or at least one of the major problems); and I am not at all sure that I know what are the proper solutions, but at least I will take a position. In the Bible, teachers are separated from exhorters.[1] Permit me to exhort a bit, keeping in mind that the definition of "exhortation" includes a sense of urgency.

I am going to limit my remarks essentially to manpower or industrial relations centers because of my own knowledge limitations. Frankly, I had hoped I could "crib" my remarks from the March 1970 Manpower Report of the

---

Herbert Heneman is Director of the Industrial Relations Center at the University of Minnesota, Minneapolis, Minnesota.

---

[1] Romans, 12:8.

President, or the prestigious, significant and vital report on The Behavioral and Social Sciences: Outlook and Needs[2] (hereafter referred to as B and SS). But a rereading of the Manpower Report in light of today's conditions leaves one with a sense of frustration. Thus, for example, on page 1 it foretells chapter 2 which "...describes the subtle shifts in trend which occurred during 1969, as the forces of inflation were gradually being brought under restraint." Apparently these shifts are too subtle or too gradual for my ken. Frankly, I did not find much to help me in the Manpower Report. On the other hand, the B and SS volume offers much food for thought--in some areas it reinforces my prejudices, and in others we disagree. In general, it ignores manpower or industrial relations. Nonetheless, I recommend it to you most highly.

So I prefer to start on my own--to set up my own ducks and brew my own witches broth. The resultatn recipe may be called a "stew," "booya," or the "veteran's shingle." Here are the ingredients:

1. The basic setting is one of change and dynamics in all areas of social activities. There are population explosions, education explosions, urbanization, riots and revolution, alienation, frustration, changing occupations, and severe manpower obsolescence. You can name the phenomena, but here it suffices to argue that business as usual could be a grotesque concept--even in Social Science Research Centers (hereafter called SSRC's). Our society is literally shaking apart at the seams!

---

[2]National Academy of Sciences, Social Science Research Council, The Behavioral and Social Sciences: Outlook and Needs, Englewood Cliffs, New Jersey, Prentice-Hall, 1969.

2. We are rediscovering that social behaviors are exceedingly complex and largely unknown, with time running against us. In the past 20 years, for example, we have learned a little about how to improve reading skills. During the same time period, the world has added 100 million people to its stock of illiterates. We have dealt with bits and pieces--our disciplines are essentially closed systems. Our research studies need to employ more of an open systems approach if our aim is not only improved understanding but also improvement in both amelioration and prevention of social problems--especially the latter.

3. If our nation were engulfed in a wave of physical health epidemics, somebody might argue that our medical schools and research centers were deficient. Current employment problems of unemployment, underemployment, the draft, wage inflation, pensions, labor disputes and many others might suggest that our schools and centers of industrial relations are deficient. In a sense, these problems represent a report card on the effectiveness of our SSRC's. Fortunately (or unfortunately) in the manpower field (and in several other social science areas) these centers are so few, and their works so scanty, ineffectual and unknown, that we have managed to escape public outrage, outcry, and criticism. This is our springboard to the SSRC's of the 1970's, and it is not just a lack of resources. As Milton Derber noted almost a decade ago (1962), the reason for the critical attitude among scholars toward these research agencies is quite simple: "We are not using the resources available in a manner which is most conducive to the development of the field."[3] He describes such research as "cautious" and

---

[3]Milton Derber, "Divergent Tendencies in Industrial Relations," Industrial and Labor Relations Review, Vol. 16, No. 4, July 1964, p. 599.

"unimaginative," adding relatively little to understanding. Other reviewers, including me, have been equally critical.

4. It is an education to go to a meeting of directors of industrial relations centers. Their numbers are few, their interests diverse, their resources are meager. They range from one man shows to graduate degree granting institutions.[4] Some university centers teach noncredit adult courses such as labor education or management development, some are essentially research oriented. Despite great arguments about the most common names of Industrial Relations Centers, they are more united in name than in functions. Most of them are capable of only the most limited research efforts, either quantitatively or qualitatively. There are related centers such as those studying education and productivity and social systems, for example, at Wisconsin. There are some research centers in federal government and a few in state and local government, plus a handful of private centers. In toto, these SSRC's represent at best a pitiful mixed bag in view of our current needs for understanding in the industrial relations and manpower areas. We dupe not only society, employers, and employees, but our practitioners as well. This is a crucial part of my argument.

5. There are probably more than 100,000 personnel and labor relations practitioners in the U.S. today, and these are not the total manpower or industrial relations professions. It is one of the fast growing professions, up from 52,000 in 1950 to 98,000 in the 1960 census--an 87 percent increase.

---

[4]See Julius Rezler, "The Place of the Industrial Relations Program in the Organizational Structure of the University," Industrial and Labor Relations Review. Vol. 21, No. 2, January 1968, pp. 251-258.

The end of growth is not in sight. Increasingly, these practitioners need an advanced degree, preferably an M.A. By way of occupational comparison, there were in the U.S. in 1960: 83,000 dentists, 92,000 pharmacists, 30,000 architects, 52,000 aeronautical engineers, and 41,000 chemical engineers. Of these, only aero engineering had a faster growth rate than did personnel and labor relations. Almost every one of these professions I have cited has a separate school or major department at most major universities to act as a "home base". Almost all professions have an umbilical cord back to the university for intellectual support and nourishment. In manpower and industrial relations, with a few exceptions, they do not have a home base to which they can return and relate meaningfully--one that could supply, through research, new concepts, techniques and developments.

6. There is a curious and serious gap between the manpower and industrial relations researcher and the practitioner. This gap represents the heart of my argument today; namely, that our social science and industrial relations research centers lack relevance to the practitioner, and that this lack of relevance stems from a lack of a sense of urgency. We can ill afford this callous indifference and intellectual diddling while our social strains are posing such grave and increasingly aggrevated problems.

I do not pretend to know why we have neglected the practitioner and the micro approach. As one trained in economics, but now fiercely proud of my new profession of industrial relations, perhaps our macro training in the 1930's and 1940's stressed either Keynesian national income approaches, or for some of us labor economists, so-called institutional approaches. We just did not think very much about, or of the significance of, the individual

employing unit. That was little stuff--an unimportant, messy detail--losing sight of the forest with preoccupations with the trees. Why mess up the beautiful picture with facts? If one thinks big, he thinks macro--e.g. social policy. Who wants to think little?

There are those who, as I, argue that the heart of employment relationships is micro--in the work-place.[5] There are probably many more who would contend that this really is the concern of personnel management, a low grade clerical function taught by neanderthal types in the business schools--mere tradesmen. Perhaps the truth is nearer the old adage of the butcher who sold rabbit sausage. When pressed to reveal the specific contents of his product, he contended that it was 50% rabbit meat and 50% horsemeat--you know, one rabbit to one horse. It is my argument that our current research efforts are horsey--too much macro to micro to provide proper balance, and that our planning for SSRC's in the 1970's must recognize this squarely. Again, I reiterate my grounds for argument of relevance and urgency, and I would also plead my case on the grounds of scientific method. To me (and many others), a scientific theory is a conceptual model which is capable of being tested empirically. Thus, testing models and theories requires cooperation between town and gown. The role of the practitioner in

---

[5]Cf. Arnold R. Weber, Public-Private Manpower Policies, Madison, Wis., Industrial Relations Research Association Series, 1969, p. 1. In the same volume see Arthur W. Saltzman of the Ford Motor Company (on p. 79) who says "In 1968, the Federal Government acquired a new manpower partner, the American Business Community. It is likely that neither partner will ever again be quite the same". See also Gerald G. Somers, "The Labor Market and Industrial Relations Research," in Essays on Industrial Relations Research -- Problems and Prospects, Ann Arbor, The University of Michigan and Wayne State Institute of Labor and Industrial Relations, 1961, p. 59.

verification and refutation is obviously invaluable and indispensable. What is less obvious, perhaps is his crucial role in suggesting variables and relationships for incorporation in abstract models. Too few academicians have been willing to listen. The best source of good models is real life.[6]

The basic thrust of SSRC's for the 1970's, in my opinion, should be a return to reality, to a deliberate evaluation of results of our efforts upon real life problems. To continue to have as our primary aim and role mutual titillation and admiration of our fellow scientists is perhaps a somewhat necessary, but certainly not a sufficient condition or reason to even have SSRC's in the 1970's. Sometime, hopefully in the 1970's, the little boys playing their private games in their little closed closets should open the doors and let in a breath of fresh air.

7. There is plenty of urgent work to be done in SSRC's in the 1970's, at least in the manpower and industrial relations area.[7] Goals, models, and research designs require urgent attention. Human and job adaptability in a changing world, manpower planning and forecasting, learning theories, collective bargaining, and economic security systems offer some major examples of current ignorance that could profitably stand attack. Here we face again the questions of relevance and urgency. Attack by whom?

---

[6] From H. G. Heneman, Jr., "Conceptual Systems of Industrial Relations," Manpower and Applied Psychology, Vol. 1, No. 2, 1968, pp. 95-101.

[7] Cf. H. G. Heneman, Jr., "Contributions of Industrial Relations Research," Manpower and Applied Psychology, Vol. 2, No. 2, 1969, pp. 9-12. (N.B. I cite myself not because I am so doggone good, but because I do not know of anyone else who has been dumb enough to stick his neck out so far.) This is available without charge for single copies as Reprint 62 from the University of Minnesota, Industrial Relations Center, Minneapolic, Minn. 55455.

The researchers of the 1960's have not been successful in communicating their findings. We do not know how much is spent on industrial relations research. Cecil Goode estimated that of the $7 billion expenditure spent on research in the U.S. in 1957, only 1 percent was spent for "human relations research," and half of that for so-called personnel research.[8] In 1968 we spent $26.5 billion on research of which 4 percent or roughly $1 billion was spent on the social sciences.[9] Clearly we seem to be spending more for social science research, but what of our impact? I would venture that most practitioners never heard of our research, be they in government agencies, business firms, or unions. As one example, take the study by Dunnette and Brown. They asked 200 business executives about some "most significant" recent articles and books (by such people as Drucker, Argyris, Whyte, Haire, Skinner, Herzberg, Leavitt, Sayles, Festinger, Adams and others).[10] Their most significant finding was the small proportion of executives who had even heard of the major contributions, and only one-fifth said that one or more of these contributions had significantly influenced conduct of their firm's business. Dunnette and Brown suggest a difference in value orientation as a possible explanation--the researchers overly imbued with instrumentation and the executives not interested in research that is not directly relevant to real life problems. They further suggest that

---

[8]Cecil E. Goode, Personnel Research Frontiers, Chicago, Public Personnel Association, 1958, pp. 118-119.

[9]"Research Outlook," Business Week, February 3, 1968, p. 73.

[10]M. D. Dunnette and Z. M. Brown, "Behavioral Science Research and the Conduct of Business," Academy of Management Journal, Vol. 11, No. 2, June 1968, pp. 177-188.

research findings be published twice--once for fellow researchers, and once for practitioners; and that reviews should appraise not only substantive and technical contributions but also operational potential and development as well! Again, I argue that this concept of relevance is of major importance in any discussion of SSRC's in the 1970's.

8. At this point let me briefly summarize my biases so far.

a) Out setting is one of rapid social change--social behaviors are incredibly complex.

b) SSRC's to date have had little impact on the real world--for a variety of reasons we have many unsolved problems--out society is shaking apart at the seams.

c) Our present set-up of SSRC's is grossly inadequate for the 1970's--it is folly to continue to do business as usual.

d) Current SSRC's have too few resources and little commonalty in purpose, program, and organization.

e) A major reason for their status has been lack of relevance of their programs and lack of a sense of urgency. Too many still pursue knowledge for knowledge's sake--a worthy and needed goal but not one into which SSRC's should pour all of their resources.

f) Current SSRC's overemphasize macro problems and tend to ignore a large body of practitioners.

g) The current SSRC's generally fail to relate their findings to practice and development.

h) The SSRC's of the 1970's need to become urgently relevant, tackle more micro problems and concepts, and meld these with macro concepts and problems. They must seek out meaningful evaluation of results. They

must develop manpower technicians and demonstrate manpower techniques.

9. Now may I turn briefly to the important book, The Behavioral and Social Sciences: Outlook and Needs (B and SS). They deal with many of the same problems I have dealt with, except that they do not mention employment problems or manpower. This is a curious and serious omission, probably explainable by the fact that the report was drawn up by those from the old line social science disciplines such as economics, sociology, psychology, etc. None of these has manpower and employment as its central concern. Such emphasis and major concern is the central thrust of our great new social science, industrial relations. But despite their lack of specific reference to industrial relations, the B and SS report contains much of relevance to my argument. Let's begin with three major quotes:

a) All Sciences make some distinctions between basic research, and the development of products, processes or services based on research.....the scientific method can be applied to problems of a practical nature, whether or not the applications can be derived from the basic science of the time.

The third category of scientific activity -- development -- is more difficult to define for the behavioral and social sciences.[11]

b) ...our society is now deficient in careers, parallel to those in engineering, aimed specifically at the application of behavioral and social sciences, and to its recommendations for expanded university training, across existing disciplinary boundaries in applied social science.[12]

---

[11] National Academy of Sciences, Social Science Research Council, The Behavioral and Social Sciences: Outlook and Needs, Englewood Cliffs, New Jersey, Prentice-Hall, 1969, p. 5.

[12] Ibid., p. iv.

c) ...many departments in leading universities will not accept students for graduate work unless they indicate interest in obtaining the doctorate. At these institutions the master's is given either in recognition of a certain amount of work on the way to the doctorate, or as an 'also-run' degree for students who prove unsuited for doctoral training.[13]

To sum up these quotes, (1) in the social sciences we need to stress development, which currently gets short shrift, (2) we need to train social science technicians, and (3) existing social science disciplines are essentially intellectually snobbish, ever looking "upward" toward basic research and neglecting the "downward" look toward application and development of both tools and technicians.

The solution proposed in the B and SS report is straight forward and direct.

First, they consider the possibility of providing better balance within existing social and behavioral science departments and they reject this because they feel that these departments will want to continue their present aloofness. Second, they consider existing institutes and centers--can they, and should they, be beefed up? Some 10 percent of all university social scientists are now in social science institutes. However, at least two-thirds of these institutes are not primarily concerned with applied social science or development; only one-half of the institutes are interdisciplinary. A major flaw in these institutes is their lack of status and independence. Their major limitations include:

---

[13] Ibid., p. 143.

(1) Lack of size

(2) Dependence on academic departments for part-time staff. These staffers are pulled two ways, i.e., toward the institute or center and toward the respectable department's goals.

(3) Most institutes lack a regular budget or "hard money" and have to depend upon grantsmanship and handouts.

(4) Most institutes do not control doctoral dissertations, and the most promising graduates must adapt to the mores and standards and interests of the academic department.[14]

So, the report goes on; it will not do just to do a minor repair job on existing SSRC's. Instead a major overhaul is desperately required.

A Graduate School of Applied Behavioral Science

Thus, there would be no doubt about the purpose and emphasis of the school--it would stress application and development. There would be some limited basic research, but the emphasis would be upon application and real-life problem solving. It would cure most of the current ills in our existing approaches, especially the weaknesses in most of our poor, fumbling, insignificant SSRC's. It would attract many of our top youth, currently repulsed and alienated by what they regard as the sterile and irrelevant focus of existing academic departments. The new applied graduate school would provide a strong force for relevancy and urgency.

Its organization would be deliberately designed to avoid past mistakes.

---

[14] Ibid., pp. 194-200.

It would have:[15]

(1) A full-time tenured faculty,

(2) A guaranteed "regular" budget,

(3) A graduate degree--it would grant both M.A.'s and Ph.D.'s,

(4) Internships,

(5) Intellectual respectability by application of hard (quantitative) research designs.[16]

Up to this point I would say "Hallelujah!" Their recommendations contain much truth, but at several points I find myself in major disagreement.

First, the new school would be almost exclusively macro oriented. It would study public policy and social problems; "It would probably not be concerned with many of the familiar problems of applied behavior science, such as personnel selection and training...or other such matters in which benefits are largely to the advantage of particular clients already served by the professional schools rather than to the society at large."[17] I find this argument exceedingly difficult to follow let alone accept. It seems to negate their demonstration and call for application and development; I assume that this can be done at the macro level, but why stop there? Why not go to the practitioner and client level--that's where the employment action

---

[15] Ibid., pp. 205ff. At the outset it would not have an undergraduate program.

[16] On this later point, I believe it would also gain in respectability in terms of the relevance of its research.

[17] Ibid., p. 203.

is. Let's include micro.

Second, I do not know that micro research which is advantageous to clients and practitioners would be harmful or antithetically opposed to the public interest. Medical research may make doctors richer but it may also cure patients and improve public health. Personnel research might benefit firms but might also keep employees off the public relief roles. I have no objection to improved employment health through private means.

Third, I do not know why they want to exclude "...many of the familiar problems of applied behavioral science, such as personnel selection and training..." This seems to equate familiarity with solution. Cancer is an old familiar problem--it still needs study. John P. Campbell of the University of Minnesota IRC has just written the first review of its kind on "Personnel Training and Development". It will appear as a chapter in the Annual Review of Psychology, Vol. 22, in 1971. It does not conclude that we have solved all or even a major portion of theoretical or applied or developmental problems of manpower training and development as either a macro or micro scale. It does say, "By and large, the training and development literature is voluminous, nonempirical, nontheoretical, poorly written, and dull...it is fadish to an extreme".[18] Many other examples could be given for other applied areas of behavioral and social science research.

So my first major objection to the B and SS report is that the applied schools would emphasize macro almost to the exclusion of micro research. I believe both are needed.

---

[18] From his preliminary mimeographed copy, p. 2.

My second major objection concerns the distinction between basic and applied research. True, B and SS specifically states that this is a distinction that they do not accept, and that there is not a sharp distinction between basic and applied research.[19] But the thrust of the new school they suggest does, it seems to me, seek to remedy and overbalance of emphasis upon basic research in the traditional departments with an equally undesirable overbalance toward application in the new school. The two are a continuum that belong together.

My third major objection is to their method of procedure. We would begin by gathering lots of data and build a bank of social indicators. They would provide indices of social change and estimates of current social well-being. In my opinion I would rather start with goals and objectives. I define a problem as failure to attain a goal or objective. Hence I cannot see how one would evaluate data meaningfully without reference to goals and objectives. Here is where I think that we need to bring clients and practitioners squarely into the picture. I do not believe either Washington[20] or the Campus High Priest of Social and Behavioral Science can intuitively detect, or should dictate, personal and social goals. The very word "alienation" in today's context indicates what I am trying to say.

Fourth, I believe that a Graduate School of Applied Behavioral Science is too big in scope to be practical. As I understand the argument, faculty in the applied school would be united by common methodologies (quantitative);

---

[19] Op. cit., p. 203 and Chapter 4.

[20] George.

but surely it would be better if these scholars had common interests in problems to be studied and common substantive background sufficient to provide effective relationships. You can "office" me next door to a linguist in an applied school but I doubt if we would communicate very much on coalition bargaining or micro manpower planning.

For these reasons, then (and others) I would suggest that we set up more Graduate Schools of Industrial Relations. And more Graduate Schools of Family Relations, or any other conceptual area of study that is relevant to the needs of our times. I realize the price would be high, and at the outset we would have to regard such ventures as risky. I would seek relevance in terms of real life problems. I would not exclude micro or client centered problems--indeed, I would encourage their study. I would strengthen the application and development facets, but I would not label them "applied" schools; nor would I downgrade or de-emphasize basic research. I would seek to blend the two in better proportions. My yardsticks would include the pragmatic (but not solely these) and I would stress cost-benefit comparisons. After developing goals, I would use them as yardsticks and I would gather "social indicators".

I would have a full line graduate school giving M.A. and Ph.D. degrees; graduate degrees provide needed research emphasis. I would seek to make the M.A. a journeyman's degree and to provide technical training. I would keep the Ph.D. as a research degree essentially. I would not award an M.A. as a consolation prize.

I would seek a paradigm, and seek a general conceptual system to provide a framework or roadmap.[21] I would broaden the traditional nexus of the field

[21] See H. G. Heneman, Jr., "Toward A General Conceptual Systems of Industrial Relations: How do We Get There," in Gerald Somers (Editor) Essays in Industrial Relations Theory, Ames, Iowa, Iowa State University Press, 1969, Chapter 1.

to include other vital aspects of employment such as related aspects of education and health. I would try to overcome old divisions of labor such as collective bargaining in the public sector versus collective bargaining for teachers and nurses, etc. We would need to explore basic subjects such as the meaning of work in the 1970's--apparently it is changing. But how? and why? And what is its significance? Do people choose to work "to live" rather than to achieve?

I would seek to find ways to motivate people to work in SSRC's--those who get rewards from service to clients as well as those who seek the accolades of their peers.

I would seek a means to draw together those who are interested in such centers both from academia and especially those from without (essentially the practitioners). I would make these centers literally, and locate one in every major region of the U.S. Each could have satellite centers, granting M.A.'s and working jointly on research projects and conferences, etc. I would establish exchange relationships between the faculties of the major graduate schools and the satellites, and between the schools and practitioner client organizations. I would have internships flow two ways, from the schools to the practitioners and vice versa. I would expand relationships with other schools and agencies following and building upon the excellent example of the Industrial Relations Center here at Ames. I would even plan to teach industrial relations at the junior high (as well as high school) level -- let's give would-be dropouts relevant careers to challenge them.

If I had to specify a single common goal or dependent variable, it would be Human Assets at both the macro and micro level. These would be

appraised in both social and economic terms.[22]

Each of the schools would have a common framework, hopefully, and also could develop their own areas of special interest.

At the outset of my remarks, I said that I thought I could do a little bit in the way of diagnosis. I also said that I saw dimly where we should end up in SSRC's for the 1970's, at least in the area of manpower and industrial relations; but I was frank to confess that I do not know how we will get there or whether we will.

There are several possibilities of how we get there. First, we can just leave it to chance and let the SSRC's develop naturally. I do not think this option is viable in our urgent need for both relevance and expansion of research. Second, we could seek money and let the government and foundations tell us where to go, subtly perhaps, but firmly. Third, we could have the existing Centers meet again (as they did 25 years ago at Minnesota) under the aegis of some group such as the Social Science Research Council and perhaps IRRA, ASPA, SPA, etc. Here I would plead that the agenda be concerned essentially with substantive topics rather than administrative arrangements and details. I would prefer this route.

In any event, may I conclude by a brief summary statement of my belief that we need more urgency, more relevance, more micro, more client-centered

---

[22] Cf. Rensis Likert, The Human Organization, New York, McGraw-Hill, 1967, Chapter 9; R. Lee Brummet, et. al., "Human Resource Measurement: A Challenge for Accountants," The Accounting Review, Vol. XLIII, No. 2, April 1968, pp. 217-224; J. S. Heikimien and C. H. Jones, "Put People on Your Balance Sheet," Harvard Business Review, Vol. 45, No. 1, Jan.-Feb. 1967, pp. 105-113; also T. W. Schultz, "Investment in Human Capital," American Economic Review, Vol. 51, 1961, pp. 1-17; Gary S. Becker, "Underinvestment in College Education," American Economic Review, Vol. 50, 1960, pp. 346-354.

approaches in the SSRC's of the 1970's. We do not need application and development alone, but we need to expand these to get better balance. We need a better blend of theory and practice. Those of us already in the game should take the time and effort to provide such conceptual and operational meaning.

Chapter 10

Emerging Need for Interagency Coordination and Development Personnel in the Manpower Field

George M. Beal

INTRODUCTION

There are three main objectives in this paper:

1. Provide a brief analysis of the social context out of which this specific manpower need arises.

2. Attempt to briefly specify the particular role requirements of this manpower category.

3. Suggest the type of training needed for the role incumbants in this manpower category.

THE SOCIAL CONTEXT

The massive changes in science and technology, our rapidly increasing population, and the pressure on our environment have produced major changes

---

George Beal is Chairman of the Department of Sociology at Iowa State University.

in the social organization of our society. Major changes in social organization obviously create the need for new roles and occupational categories. It is difficult to capture these social organization changes in a tight conceptual summary. Roland Warren, in his book The Community in America, provides a framework within which a summary can be attempted. I will use his general headings and provide some elaborations which I hope are germane to this paper. While many of the points made may not be new to this a audience, the general context set and the inferences drawn may sharpen the focus on the occupational category of central concern.

As seen by Warren, the following are some of the major social organizational changes:

1. An increasing specialization or division of labor. For example, in 1949 there were 22,000 job categories in the nation. By 1959 there were 75,000 and by 1975 it is projected that there will be an additional 50,000 job categories which do not presently exist.[1] The result--diversification, specialization and crucial interdependence.

2. An increasing growth in the number and kind of special interest groups and associations in our society--specialization at the group level. For example, in 1956 the Gale Research Company in Detroit published the first edition of the Encyclopedia of Associations and listed 8,538 nonprofit American organizations of national scope. In their fifth edition in 1968 they listed almost 34,000 organizations of a national or international scope. In the executive branch of the government there were approximately

---

[1]Raymond W. Mack, Transforming America: Patterns of Social Change, Random House, 1967.

2,000 agencies, bureaus, and departments in 1967. In 1968 Paul Miller, Assistant Secretary of HEW, reported there were over 200 Federal programs dealing with what might be called development--administered by over 20 departments and agencies.

3. An increasing amount of vertical orientation and hierarchy from local to successive higher levels of organization--in both the public and private sector. Much more will be said about this phenomena at a later point in the presentation.

4. A continuation of the growth of large and complex organizations with the associated impersonalization and bureaucratic structuring of the relationships among men. Complex organizations, public and private, profit and nonprofit oriented, demand the development of specific guidelines, rules and procedures for efficient operation. People within the organizations, as well as their various clienteles, are treated more impersonally. Attempts to "humanize" the relationships in complex organizations have met with only limited success.

5. The continued transfer of functions from the family or neighborhood groups to private enterprise and public service agencies--note again the large and increasing number of private and public organizations and agencies already mentioned.

6. Continued rapid concentration and congestion of people in urban and suburban areas with an accompanying depopulation of rural areas. Over 70 percent of the people live in urban areas. Seventy percent of the people in the U.S. live on 1 percent of the land. A crucial issue is what role the less populated areas will play in the distribution of people, economic and other institutions as we look forward to an additional 100 million Americans

by the year 2000.

7. Changing values and increased challenges to existing values. Many of our traditional values are being challenged by today's youth as well as people from many other walks of life, including the intellectual community and the left and right.

A number of ideas from the above analysis are crucial to the discussion that follows: the transfer of functions and services from the family and neighborhood to private enterprise and private and public agencies, the overwhelming growth of these services and vast increase in the number and type of agencies, the categorical specialization of services, the bureaucratization of the social systems, and the increasing amount of vertical orientation of these agencies.

All phenomena exist in time and space. The time is now and the projection in the future--the projection of the future state of affairs. People exist in space. In our complex society we have developed a wide variety of social systems to attempt to facilitate the articulation of individual needs and behaviors, and provide services through a wide variety of effective and efficient social interaction patterns. We have developed a complex set of institutional structures--family, government and related agencies, religion, economic recreation and cultural arts. We have organized formal voluntary associations. Despite rapid and complex transportation and communication systems the fact still remains that most of our interaction patterns have some type of space or territoriality basis; and for many of the chief concerns of life, these primary interaction patterns are within a limited territoriality base. By territoriality we mean the geographic base or space dimension of a social system that are formally, informally or

psychologically designated as meaningful arenas of identity, interaction, administration, planning, decision-making, action and service delivery. (For example, neighborhood, community, multi-community, county, city, multi-county, functional economic areas, state, region or nation.) In addition, there are many other civil divisions; e.g., conservation, recreation, zoning and school districts. People reside in, live in, interact in, seek services in, usually identify with, and are legally responsible to and under the authority of various territoriality based social systems. These territorialities are the arenas in which problems arise, decisions are made, planning occurs and plans are carried out for what is assumed to be the common good of the members of the various systems.

Units of social organization exist in local territorialities; e.g., communities and counties. These units are engaged in production and consumption of goods and services. In most cases these units are a part of a vertical bureaucracy, i.e., they are a part of some bureaucratic structure with various levels and headquarters outside of the local territoriality. However, these vertically oriented bureaucracies carry out most of their activities in the local territoriality; i.e., they attempt to work with local individuals, institutions, agencies, formal groups, informal groups, categories of people or the community as a whole--they attempt to orient themselves horizontally to various clienteles in the community.

A. A common assumption is that the local territoriality is a unified and integral unit of larger society. (See diagram Total System Linkage.) That is, local territorialities are often conceptualized as being unified social systems that are integrally related to the larger society as units.

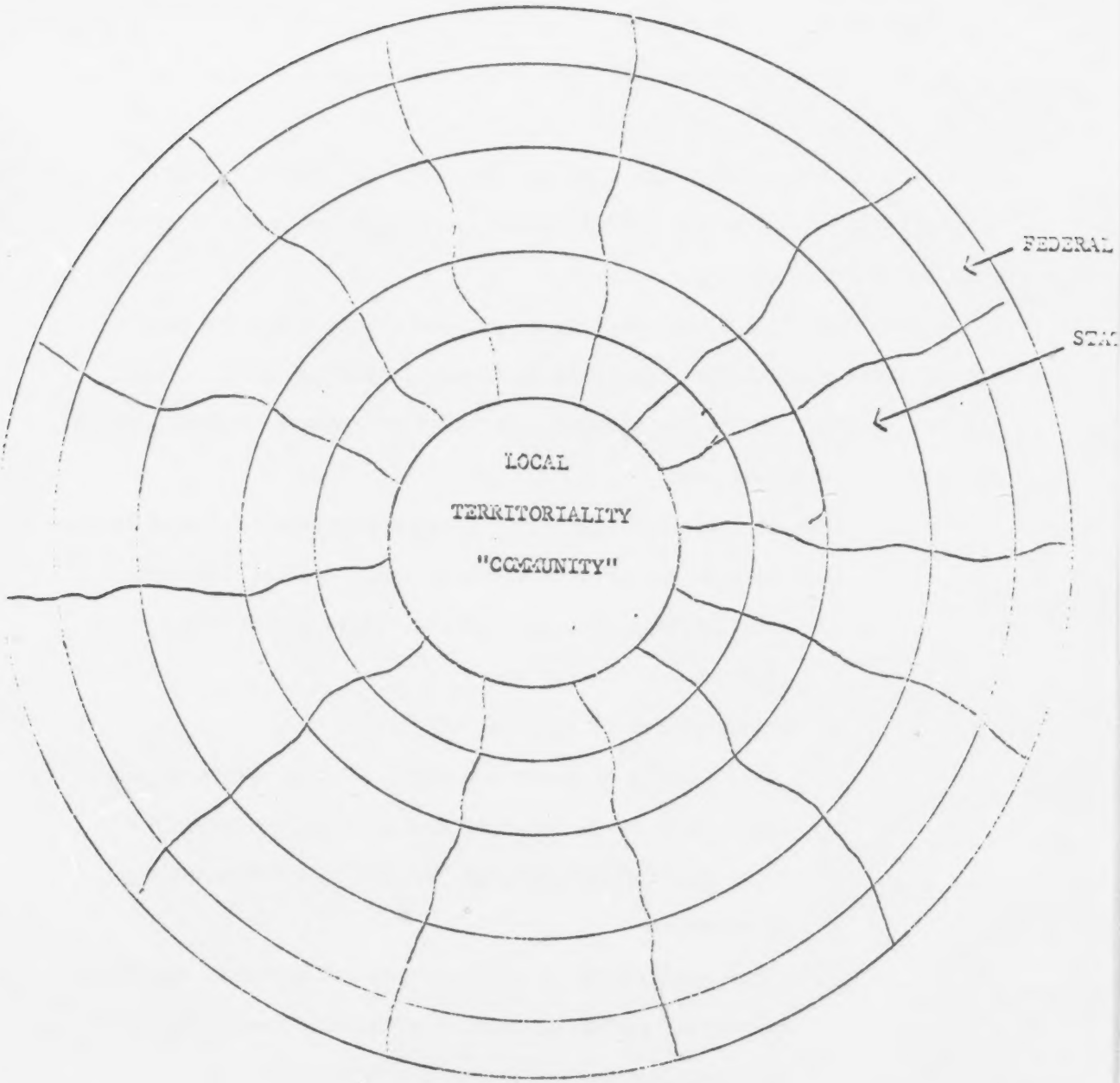
Though there is some validity to this conceptualization, a more accurate conceptualization of the manner by which local territorialities are linked to the larger society is as follows.

B. Differentiated vertical linkages. (See diagram Differentiated Linkage.)

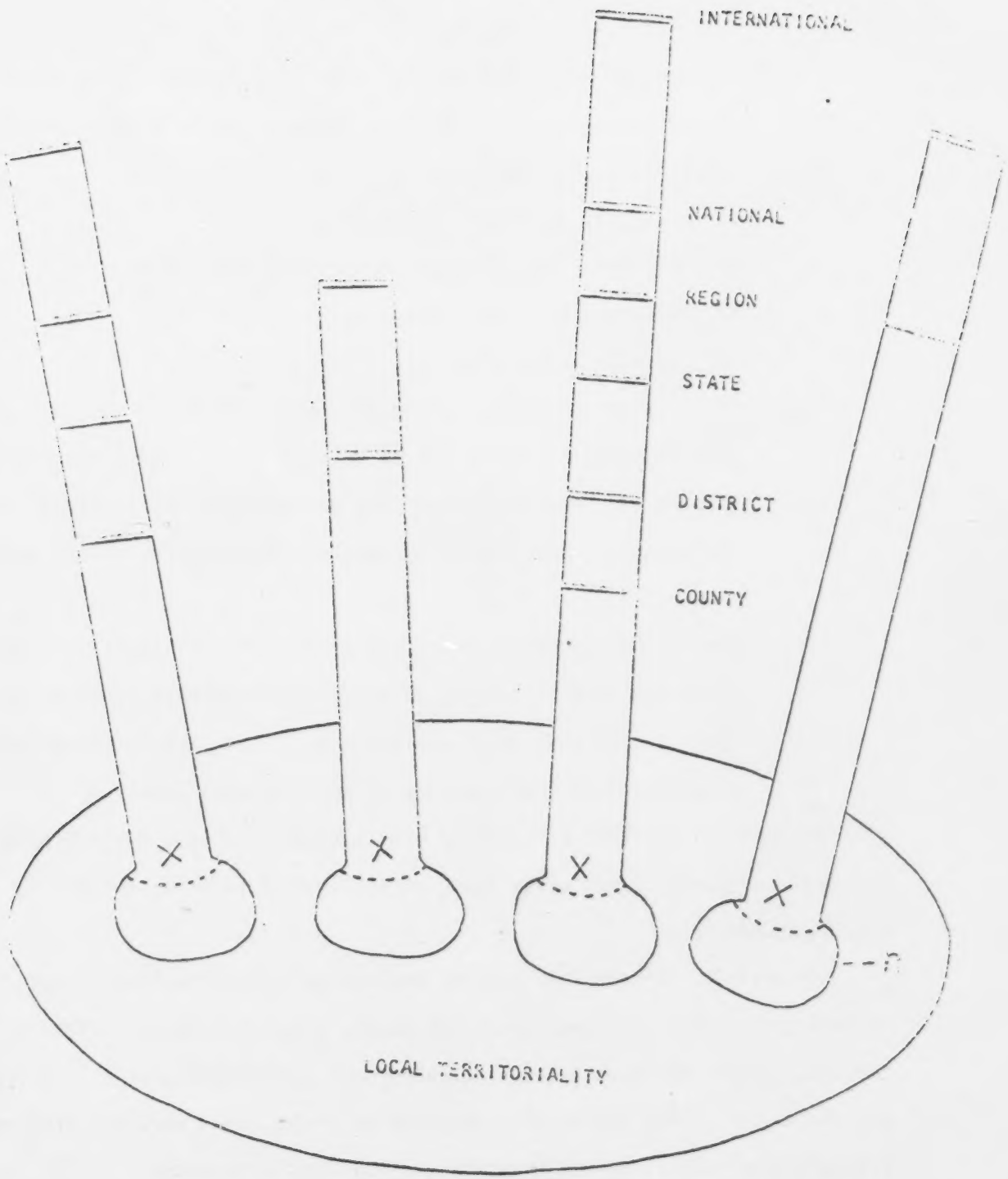
A more accurate description of how the local territoriality (e.g., community) is linked to the outside world is probably in terms of differentiated vertical linkages.

Within the local territoriality (e.g., community) there are many diverse local subsystems: retail outlets, manufacturing plants, banks, churches, public and private agencies, units of government, schools, formal voluntary associations, etc.

1. Each of these differentiated local subsystems is linked in some fashion with the outside world through vertical linkages.
   a) local chain stores to district, state and national headquarters
   b) branch plants to national offices
   c) local schools to state and national departments of education
   d) local governments to state and national governments
   e) local churches to district and national denominational headquarters
   f) local agencies to district, state and national agency headquarters: social welfare, health, employment, Civil Defense, Cooperative Extension, Red Cross, etc.
   g) local formal voluntary associations to state, national, and international headquarters, e.g., Rotary, Federated Women's



TOTAL SYSTEM LINKAGE



DIFFERENTIATED LINKAGE

Club, League of Women Voters, Chamber of Commerce, American Legion, Elks, etc.

2. These local subsystems usually have (when compared with each other) diverse goals, policies, programs, beliefs, sentiments, norms, services, etc.
   a) different geographic headquarters
   b) different (though often overlapping) memberships
   c) different reference groups
   d) different clienteles
3. These local subsystems are usually more vertically oriented (are oriented to the system of which they are a part vertically outside the community) than they are horizontally oriented (oriented to other social systems in the community or the total community).

   Many problems may arise because of lack of horizontal orientations and lack of clarity of roles and misperception of roles. There is the problem of horizontally linking the personnel and programs of various agencies at the community level.

The vertical patterns are usually highly structured by clearly defined contracts, charters, legislative laws, administrative policies and administrative procedures.

The vertical patterns are usually bureaucratically oriented--characterized by rational planning, specified goals, prescribed means, authority patterns, norms, sanction patterns (rewards and punishments), sets of beliefs and sentiments. They are usually serviced by professional workers, program aids and materials, training programs and additional resources.

On the other hand, the horizontal orientation of local units may be characterized as follows: lack of structure; diverse goals; lack of rational planning; diffuse informal roles, norms, sanctions, sentiments; lack of authority and exhibiting ad hoc structuring--loose, diffuse symbiotic relations as basis for interaction and goal accomplishment. "Packages of services" needed to solve individual or social problems are difficult to mobilize. Attempts to this end are usually informally based on some type of exchange or coordination premise. Results are often ineffective.

In many local territorialities (e.g., community) there is no decision-making unit or arena. Decisions are made on specific problems by coalitions of individuals or groups. Major decisions are often made by the general or issue area power structures.

All local subsystems are not vertically oriented or do not even have a vertical affiliation. However, those that tend to be the most effective and have the most prestige and resources are vertically linked.

In summary, in my opinion, one of the most significant social organization issues involves four main facets: (1) the increasing role of formal government and private organizations and agencies set up to meet the perceived needs of people--rural and urban; (2) the high degree of bureaucratization and categorical specialization of functions and service delivery; (3) the vertical bureaucracy orientation of these social systems, and (4) the fact that individual and social system problems do not define themselves in nice categorical specialized needs, nor are there pre-packaged resources available for problem solutions. Two examples will illustrate this last point.

The first illustration involves the individual--alcoholics. Assuming

the goal of rehabilitation, different alcoholics will probably need a wide range of services for rehabilitation. For example, a given alcoholic may need the following services: a detoxification center, probation supervision, counseling or psychiatric treatment, Alcoholics Anonymous, family counseling, health and medical care, welfare services, vocational testing, vocational retraining, credit counseling, employment service, employment supervision. In the real world we find most of these services available; yet they are segmented into specialized, individual, categorical agencies. In most cases the alcoholic has the responsibility of trying to find these services (many of which he doesn't know exist), determining the packages of services which meet his need, and attempting to secure the proper mix of services to meet his need. What often happens is that after one or two abortive attempts to secure the individual services, usually resulting in referrals to another agency, the individual alcoholic "refers himself" back to the local tavern or bar. The point is that most of the services needed exist and are available but exist in specialized, categorical packages. In many cases the agency professionals are only aware of the services their agency offers and are not aware of other services. If they know of other services, they have not established the relationships (systemic linkages) with other agencies and their personnel so that the total needs of the individual can be assessed and the total package of service needs unique to the individual case can be delivered. Though alcoholics have been used as the example, similar analogies can be made for a wider range of individual problems: e.g., criminals, welfare recipients, unemployed, minority group members, small business entrepreneurs, etc.

Let's move to a second example, a <u>social system</u> rather than an individual

problem. Major emphasis is now being placed on social and economic development on a community or larger territoriality basis. Let's assume a given community of 50,000 is pursuing the goals of social and economic development. What are the agencies that may be relevant to this problem? Many agencies have been directly charged with delivering services to local groups to facilitate development. Rapidly we can think of a large number of agencies; e.g., municipal government, chambers of commerce, local, district and state development commissions, the small business administration, Cooperative Extension Service, OEO, Vocational Rehabilitation, HUD and its many sub-agencies, Regional Medical Planning agencies, housing agencies, model cities, urban renewal, local and state departments of health, education and welfare; employment services, and on and on.

Again, the point is that these and many other services and resources exist in specialized and categorical packages which may provide the ingredients to solve the problem but as such do not fit the problem as defined locally. In most cases these resources are not brought to bear on local problem definition and solution.

I assume that this is not the time and place to move to discussion of alternative structures for the delivery of services to local levels. (Parenthetically, I think much greater human and financial resources should be allocated to the development and testing of institutional innovations.) Rather I will take the posture for the remainder of the paper that for the moment we will accept the present structural organization for the delivery of services as given. With this assumption, the basic question becomes what new or revised occupational role is needed to more effectively deliver the existing services and resources presently available.

NEW ROLE REQUIREMENTS

I will accept as an initial premise that personnel performing various roles in these agencies need specialized training in the knowledge and technology unique to that agency; e.g., health, welfare, urban planning, mental retardation, education, etc. The rapid expansion in scope and numbers of these agencies indicates that there is much to be desired in the background and training of professionals and subprofessionals in these agencies. However, fully recognizing these points, the main thrust of this paper is that there is a much more crucial occupational role definition and needed training for a new role, or additional component of existing roles, for many people in existing agencies. It is the role that has been described by various terms such as system linkage role, coordinator role, interagency coordination, or systems coordination role.

While the importance of "coordinations" has received increasing recognition, there is much to be done to precisely conceptualize coordination and operationalize it to real world processes and coordinator behavior.

At a very general level, coordination can be defined with respect to the decision-making activities of interdependent organizations. Coordination as a process occurs when each organization is adapted to others in such a way that interaction among organizations is thought to be better than no interaction. Thus, coordination as a process involves a set of organizations or units within an organization that are aware of and are interdependent with one another for the attainment of goals. Interdependence among organizations or units may be viewed as one of two types. Organizations or units may have facilitative interdependence which permits two or more organizations or units to simultaneously maximize their goal. On the other hand,

organizations or units may have competitive interdependence where one organization or unit attempts to maximize its goals only at the expense of another.[2]

Historically, much has been written about coordination as one important element of management. However, it should be noted that almost all of this discussion has dealt with internal bureaucracy coordination; that is, most of the discussion deals with internal coordination within the bureaucracy where there exist relatively well spelled out status-roles, lines of authority and responsibility, norms and sanctions. While this type of "internal" management coordination is important, it is not the concept of coordination of crucial concern in the newly developing role definition that is central to this paper.

A second type of coordination involves a bureaucratic structure, with "theoretical" lines of authority, etc.; but because of the complexity of the organization and the institutionalized "autonomy" of the subsystems, coordination is difficult if not impossible to obtain. For example, though the City Manager legally has authority over the departments of police, fire, sanitation, health, welfare, recreation, planning, etc., he may find it very difficult to truly coordinate these activities. A county social service director usually faces the same problem.

The third type of coordination is most relevant to this paper. It may

---

[2]For a more detailed presentation of the ideas in this and following three paragraphs, as well as primary sources, see Klonglan, Gerald E. and George M. Beal, Structure of the Systems Inputs, Roles and Missions, Symposium, Framework for Evaluation of Survival and Recovery Systems, 1970. P. 19-29. Available from authors, Iowa State University, Ames, Iowa, 50010.

be termed coordination by mutual adjustment. It is the situation where there is no hierarchical authority or formal sanction structure. There appear to be two main structural arrangements under which this type of coordination is attempted. The first case is where an agency or organization is given the specific function of attempting to coordinate the programs and/or services of other organizations and agencies; e.g., council of welfare agencies or community coordinator for services for alcoholics. The second case is where there is no designated coordination agency, but coordination is carried out through the initiative of individual agencies or agency personnel working together on a more or less peer basis.

Since bureaucratic status-roles, authority, norms and sanctions are defined as not being present in either of these types of coordination, one must modify or look beyond usual internal bureaucratic coordination theory for explanatory concepts to describe and account for mutual adjustment coordination. One framework is exchange theory. Starting with the work of Homans and Blau, Levine and White[3] have adapted exchange theory for use in examining interorganizational behavior. Levine and White define organizational change as, "...any voluntary activity between two organizations which has consequences, actual or anticipated, for the realization of their respective goals or objectives." Organizations are conceptualized as dependent for their goal attainment on the operation of certain input-output processes. In order to function in the pursuit of goals, all organizations are assumed to need inputs (or resources) and they in turn

---

[3]Levine, Sol and Paul E. White, "Exchange as a Conceptual Framework for che Study of Interorganizational Relationships," Administrative Science Quarterly, 5, March, 1961, p. 583-601.

convert inputs into outputs. It is assumed that resources not under the control of a particular organization are in scarce supply so they cannot be obtained as free commodities. One source of resources for an organization is other organizations in its environment. It may be assumed that norms of reciprocity govern the securing of resources from these environmental organizations so that if something is received from another organization, the recipient must be prepared to give something in return. Usually the exact values cannot be attached to particular exchange relations either by the giver or receiver. It is this characteristic of "diffuseness" or lack of specificity that differentiates most clearly social exchanges between organizations from strict economic exchanges.

The incurring of reciprocal obligations implies the assigning of costs to participation in relations between organizations. Over time it is assumed that if relations continue, the actors in organizations attempt to achieve a satisfactory balance of exchange with other organizations in their environment. However, costs are difficult to specify and in many cases are a matter of individual or organizational perceptions of the situation. An additional complicating factor is that one organization's involvement may be governed to a degree by expectations of what can be obtained in return from a third party or generalized other in the environment.[4] (For example, several agencies may be highly motivated to coordinate activities because they think the higher vertical authority in their respective bureaucracies

---

[4]For a more detailed elaboration of the two previous paragraphs see Klonglan, Gerald E., et al. "Agency Interaction Patterns and Community Alcoholism Services," Sociology Report 73, Department of Sociology and Anthropology, Iowa State University, Ames, 1969, p. 50-64.

will reward them, or that all agencies will be rewarded for successful client service by increased funds from the legislature.)

It may be further assumed that coordination will have a higher probability of occurrence if there is: (1) a more precise definition of client problems and the resources needed for problem solution, (2) a recognition of the "wholistic" rather than categorical approach to problem solution, (3) a strong orientation toward problem solution rather than specific service delivery, (4) an organization with a systemic linkage rather than boundary maintenance orientation, and (5) a staff understanding and skill level which will facilitate coordinated actions and behavior.

Hopefully, these few comments indicate that "coordination" is not a simple concept and that the role requirements of "coordinators" are indeed complex. We move now to a brief, general description of the type of training needed for this occupational category.

TRAINING NEEDS

It is difficult and dangerous to generalize about the training of present incumbents in the multitude of organizations and agencies implicit in the above discussion. Fully recognizing these limitations, I will still state several generalizations.

1. There is a wide variation in the training, knowledge and skill level of incumbants in positions in existing organizations and agencies. It varies from those who claim to be highly professional (e.g., professional social workers, psychiatric social workers, health educators) to those with little background and training (e.g., OEO, Employment Service, model city staffs). Most agency leaders are critical of the professional competence of

their staffs.

2. In those cases where there is a relatively high level of training, the training is mainly in the speciality area; i.e., social case work, mental health, soil conservation, credit. In other cases they are trained as psychologists, sociologists, political scientists, economists, MD's, nurses, or lawyers.

3. In most cases, these people have little training in bureaucracy, complex organizations, communications and human relations. If they do have basic administrative training, it tends to be highly oriented to what is often labeled "management" training. "Management" training tends to be highly internal and vertical organization oriented--very little of it deals with systemic linkage, coordination, interorganization cooperation or coordination or multi-organization planning and action.

For example, a recent analysis (somewhat superficial) of the inservice training available to over 3,000 incumbants in one government bureaucracy, showed that over 80 percent of the training was internal or vertical system oriented.[5]

If we assume the above generalizations are in the main true and if we further assume the previous analysis of the social context and the emerging occupational category roles and needs are accurate, then one may infer a number of training needs from these assumptions.

I will attempt to state some general training guidelines.

1. It is recognized that most agency and organization personnel will continue to need some degree of training in their speciality area, i.e.,

---

[5] Op. cit., Klonglan, et al.

case work, employment placement, urban planning, vocational-rehabilitation, etc.

2. However, it is argued that selected, if not all, personnel need a much broader training.

3. It appears several "disciplines" can provide the main training inputs needed--psychology, social psychology, sociology, political science, economics and communications.

4. It can be further argued that the disciplines of philosophy and selected aspects of history and law also could make contributions to the training.

5. It is argued that the training should be truly interdisciplinary in nature; e.g., not political science majors with a smattering of the other disciplines. It may be observed that training in a given discipline often results in socializing those trained to "down-grade" or not recognize the contribution of other disciplines to problem definition or solution.

6. It is argued that a major portion of this training should add up to personnel with a more "wholistic" understanding and skills for (1) recognizing and defining individual client systems and societal problems, (2) determining the total "package" of resources available and needed to ameliorate these problems, and the mix of resources, (3) determining the delivery system or combination of delivery systems available or needed to mobilize or deliver resources to ameliorate the problems, and (4) carrying out the mobilizing and delivery of resources.

It is obvious that skills in interorganizational planning, coordination and service delivery are of special importance.

It is hoped that this relatively brief statement of the social context,

the role requirements, and the type of training needed has provided enough background for a critical evaluation and discussion of the need for this suggested manpower category.

Chapter 11

The Role of the University as a Resource in Promoting Community and Economic Development

Waldo Wegner

"The University" included in the title of my subject is very broad and covers not only the Board of Regents' institutions of Iowa State University, State University of Iowa, and University of Northern Iowa, but also includes the privately operated colleges serving our state. We are fortunate in having eight private business colleges and sixteen area vocational technical schools serving in important capacities in Iowa. All of these institutions may well serve as a resource for promoting community and economic development.

What resources can you rightfully expect to find in the university which will be useful tools in promoting community and economic development? I mention only a few such as:

Waldo Wegner is Director of the Center for Industrial Research and Service, CIRAS, at Iowa State University, Ames, Iowa.

A. Human resources

1. Some of the greatest and most knowledgeable talent in the world is available in the faculties of these colleges and universities.
2. The diversification of the faculty is a factor of a great resource.
3. The student bodies of the colleges and universities are an ultimate source of the professional talent needed for the specified promotion.
4. Included in the above would be the research capabilities both basic and applied.
5. The above human resources include technicians as well as professionals.

B. Physical resources

1. Library facilities
   a) Include technical data, table of contents, directory service, historical information, research reports, professional journals, etc.

C. Research facilities

1. Economics, sociology, agriculture, engineering, medicine, dentistry, education, industrial, and many others.

D. Extension

1. Academic
   a) Academic continuing education through seminars, short courses, conferences and symposiums.
   b) Video tape courses presented throughout the states utilizing

actual classroom techniques, professors, and facilities.

c) Correspondence courses of various types and formats.

d) Special courses for individual industries, plants, or professional groups.

E. Service

1. Services to industries, individuals, professions, political subdivisions, trade associations, schools, and others.

I know that I have omitted several other resources, but the list that I have just pointed out to you does indicate in a small way the many many resources available if people are knowledgeable about the availability of this resource and also have a knowledge of where and how to use them.

To more fully understand the role of our colleges, schools and universities, let us take a look for a moment at the original purpose--the reasons why our founding fathers passed the laws and set up the machinery so that we might have the educational facilities that we now enjoy.

The Constitution, of course, set the framework whereby the Government could establish various programs structured to help develop the nation by assisting the individual. The Land Ordinance of 1785 was the first indication of the high priority that young America gave to education. This legislation set aside one section in each township "for maintenance of public schools within the township." This is early recognition of the importance of allowing the individual to more fully realize his potential through education.

The Morrill Acts of 1862 and 1890 created institutions of higher learning through assistance from the Federal and State governments. By granting parcels of the public domain to each state, the Federal government

decreed that the sons and daughters of the working classes should have the opportunity for a college education. This was an entirely new philosophy which broke tradition that education was only for the wealthier classes.

So the role of the educational institution was established by law to accommodate the individual--to help him succeed in his chosen endeavor.

This bit of history serves only to help us identify where we are today. Our institutions are very complex. You know generally what is going on in your own college or your own university, but I believe you will agree with me that it is almost impossible for any one person to know intimately all the work that is being done.

In speaking about the subject today, it is necessary to examine the problem in two ways: (1) What does the community need? What individual talents are required in order that the community may properly develop? (2) How best can the college or university communicate the needed information to members of the community? How do we draw from our complex institution those bits of information which will be meaningful and can be put to good use?

The Smith-Lever Act of 1914 gave us the pattern by creating the cooperative extension service. While the act was originally established primarily to aid agriculturalists, the concept has been expanded to serve practically all fields of endeavor. It is through this service that the institution learns the problems of the community. University extension representatives who are in constant communication with individuals within the community bring back to the university information regarding that community's needs. These needs have been examined to determine what resources of the university are applicable to this particular problem. The

next step, of course, is to draw upon the available talent to organize and conduct the class, seminar, or workshop for individuals within this community at a place and time which is mutually convenient.

Extension service stimulates action; it causes things to happen by influence on groups and individuals; it serves as a connecting link between the people and the university. Here are some examples of what I am referring to: The University of Iowa, through its Division of Extension and University Services has offered a waterworks short course, an advanced water pollution control conference, and a middle management seminar for engineers and scientists. The Center for Labor and Management which is part of the College of Business Administration has an international reputation for its teaching and research. The Center was established in 1950 because both labor and management recognized the need for this service. All Center staff members have had positions of responsibility in industry and in labor organizations and are recognized authorities in their field. These talents are available to any community needing them. Some of the smaller private colleges provided, when needed, extension services such as Buena Vista College's Management Seminars. Iowa Wesleyan College's Department of Business and Economics conducts a Production Control Institute which teaches the use of the computer for production control. Iowa Wesleyan also has offered an Industrial Pollution Institute in response to community demand. Morningside College, answering a request from local industry and businessmen, has conducted a seminar in Industrial Electronic Data Processing which presents basic information regarding data processing. Clarke College has a computer science center which teaches applications of linear programming to industrial engineers and systems analysts. They also

have a course in project control systems for construction engineers. Drake University Center for Continuing Education designs programs to meet specific needs of special groups such as business and industry, nursing, lawyers, pharmacy, institutional management, and occupational guidance groups with special emphasis to the insurance industry so predominant in Des Moines. Examples of these types of programs are the Pharmacy Institute, the Retail Management Institute, the Management Seminar for Life Insurance Agents, the Quality Control Short Course, and the Industrial Communications Workshop.

The other two Board of Regents' institutions also carry on extension programs. The University of Northern Iowa Extension Service provides a school for bankers, a seminar for chartered life insurance underwriters, and in cooperation with the department of business at the university offers courses in engineering work standards for indirect labor force and the applications of science and technology for tomorrow's modern office. They work with the Iowa Department of Public Instruction to co-sponsor conferences and workshops for Iowa teachers. Some of their extension courses for bankers are carried on in cooperation with the Iowa Banker's Association.

Many of the colleges mentioned are private institutions in Iowa who were contacted at the same time as the public institutions regarding extension type programs under the State Technical Service Act of 1965 which CIRAS administered for the state of Iowa. This was a federal program which was set up to attempt to place into the hands of people that could put it to good use some of the results of the billions of dollars of research and development for which the government was paid, which is currently gathering dust in the archives or on the shelves of the libraries of the United States.

This was a good program to which studies and reports of a lay committee and a professional consulting firm will attest; however, due to the peculiar workings of politics, the funding for this program was not forthcoming and I am now in the throes of attempting to button-up the program with the participating institutions in Iowa by June 30, 1970.

The loss of this program will reduce the activities of the Board of Regents' institutions, but in some cases I fear that it will eliminate the efforts in the private colleges.

Here at Iowa State, the University Extension Service is divided into three major parts: Cooperative Extension, which includes agriculture and home economics, engineering extension, and CIRAS, the Center for Industrial Research and Service. Iowa State's work in agriculture and home economics is so well known that I question taking much time to explain it now. There is hardly an area in either field where an Iowa Stater has not made an outstanding contribution.

Perhaps less well known, but of equal importance to the public they serve, are the other two segments of extension--Engineering Extension and CIRAS. Since I am most familiar with the operation of CIRAS, I will save that discussion for a moment.

Engineering Extension through its Engineering Management Institute conducts a broad spectrum of courses designed to aid the working engineer whether he be a practicing engineer or on the management team. Engineering Extension also reaches other fields through fire extension service, building maintenance technology, electronics, and technical education and the engineer in training refresher courses leading to professional registration. In addition, there is a relatively new program--the continuing education via

video tape which was brought about because of a demand from individuals who want to continue their education in their own community. This program has literally made the state of Iowa into one big campus.

In the College of Engineering here at Iowa State the research function is handled by the Engineering Research Institute. Funds for the research programs of this institute are obtained from state appropriations, industrial contracts and government grants. This Institute fulfills a commitment of the college to serve the community and government.

I have rather purposely left the explanation of the program of the CIRAS operation until last. Handling questions and problems of Iowa business and industry is the task of the Center for Industrial Research and Service. CIRAS, the abbreviated name for our organization, helps bring these firms into contact with the persons, organizations, and agencies that can help provide solutions.

Most Iowa businesses and industries first meet CIRAS through our field representatives. We now have six located across the state. The offices for five of the men are located in the area extension headquarters in their home cities. The field representative don't spend much time in the office as these men are usually at industrial plants. They counsel with company executives, managers and other personnel on problems and questions.

At CIRAS headquarters there is a staff of nine industrial specialists. Each member of the staff is specifically chosen for his industrial and educational experience. Their areas of expertise include finance, data systems, advertising, marketing, purchasing, export, government contracts, chemical and industrial engineering. The central staff guide the handling

of industry questions. To help handle Iowa industry problems, CIRAS maintains a data system containing a wealth of information on the capabilities and facilities of professional organizations and industrial firms. Field visits and surveys are used to continually update this information.

Industry problems come to the central office from the field representatives, and by letter, phone, or personal visit. The data system is then searched to locate potential sources for the assistance needed. These references are then contacted to see if there is interest in being considered for the project. However, the sources are not given the name of the firm who needs the help. When searching for sources to handle a client's problem, CIRAS first contacts businesses in Iowa. If no qualified sources are available in Iowa for the problem, CIRAS next checks college professors in Iowa. Finally, if no specialist is available in the state, other firms outside the state are contacted. Then the firm with the question is sent the names of three to five sources which are interested in doing the work. The firm then decides what action it wants to take.

Of the projects that come to our office, 40 percent are handled directly by our staff, 30 percent are referred to a source of supply, 12 percent are referred to consultants, and the remaining 18 percent are referred to groups such as associations, government agencies, educational institutions, and investment companies.

A machine manufacturer recently asked for marketing help in obtaining government contracts. CIRAS representatives reviewed their procedures for bidding on military contracts as well as commercial contracts. Several procedures and changes were recommended. Appointments with proper procurement branches were arranged. The company secured new business with both

military and commercial companies. New contracts awarded to the company from one military group and one commercial firm valued at $1 million saved approximately 20 jobs.

About 30 percent of the projects came from industries looking for sources of supply or service. In six months, names of 470 suppliers of goods and services have been suggested by CIRAS as interested sources. These have included requests for a high pressure gaseous oxygen meter, for a more accurate grain moisture tester, and for a water curtain spray paint booth. Another project involved an inquiry from a professional engineering firm, asking where an Iowa company could find a source of a special casting nearer than its present out-of-state supply. After a search of CIRAS records, two such sources were suggested as interested in quoting. One was selected to handle an original order for $16,000.

Twelve percent of all projects coming to CIRAS are referred to consultants. Of the 110 consultants suggested in six months, 98 have been private professional firms and 12 were professors at Iowa's colleges and universities.

One firm asked for CIRAS help regarding new product development. CIRAS suggested that the firm contact the Des Moines office of the U.S. Department of Commerce for help in exploring export sales and obtain advertising agency help in developing increased sales effort.

A folding pontoon boat and trailer combination is now on the market through the help of the product placement program. The inventors of the boat heard of a paper similar to this one and came to the office for more information. Manufacturers were contacted and a firm at Albia signed a royalty license agreement with the inventors. The Albia Industrial

Development Commission secured a loan from the Small Business Administration to construct the building to be used in manufacturing the boat.

Several times in the past few months, individual firms have come to the campus to participate in counseling sessions with a panel of experts to discuss different quality control or new process problems. Here CIRAS brings together representatives of the university disciplines that relate to the topic. The professors have been very generous in giving of their time and welcome the challenge of these stimulating problems.

Other projects have resulted in benefits to a large segment of Iowa industry. A one-day conference for frozen food processors and merchandisers held in April, 1970, was sparked by a letter received by CIRAS several months before. Members of the firm felt the Iowa frozen food industry was moving slowly because of the limited exchange of information among areas of the industry. These comments were reviewed by several food and marketing specialists at Iowa State. They agreed that a conference would help the industry, and with the firm's help, planned the conference.

In another program of benefit to most Iowa firms, CIRAS has summarized a study of the marketing patterns of Iowa industry. Nearly 1,000 of Iowa's 4,500 industrial firms participated in answering the survey questionnaires. The study is designed to suggest guidelines that companies can use in planning and executing marketing programs. Edward Sealine, CIRAS specialist in marketing and advertising, headed the study. Assisting with the study have been several Iowa associations, universities, and agencies. The results of the survey are available upon request. In answer to one of the questions, the survey showed that more than 40 percent of Iowa industrial managers want to attend marketing management workshops.

CIRAS also prepares a directory to aid firms in recruiting prospective employees who are graduating from Iowa's public and private vocational-technical schools, colleges, and universities. Our regular communication with Iowa industry is the CIRAS News for Iowa Industry. It is published every other month and is available at no charge. The editor is a CIRAS staff member who handles our publications and information needs. As you can see, CIRAS handles a broad scope of projects. We greet new questions from new areas every day. That's what makes this work so interesting.

In conclusion, let me point out that all these resources may be available to promote community and economic development, but unless the people who would like to use these resources are aware that they are available, they are not doing the job for which they have been established. It, therefore, emphasizes the fact that each and every university and college who believes that they have such a resource make a dynamic presentation to the public of its capabilities. This cannot be done once, but is a continuing program.

This has been a quick explanation of one man's opinion regarding the role of the university as a resource in promoting community and economic development. This process is a three way street--first, find out what is needed; second, advertise your capabilities; and third, go out and do something with your vast resources.

Chapter 12

Cross Cultural Research in Management Studies

Bernard M. Bass

We are building a data bank based on the responses of managers to simulations of organizational problems. Training programs at institutes, in plants and in universities have been used for one or more of these exercises. One characteristic of each exercise is that by using NCR paper, we get copies of the manager's responses to the exercise problem that has been posed to him. These responses are stored in our Central Data Bank at the University of Rochester. Currently, we have over 30,000 of such responses in our data bank from managers in over 25 countries. A typical exercise deals with some organizational problem. It may deal, for example, with the setting of objectives, negotiating, the problem of evaluating, deciding on compensation changes, supervising, planning, etc. Therefore, what we think we have is data on how managers from different countries

---

Bernard M. Bass is Director of the Management Research Center at the University of Rochester in Rochester, New York.

respond to the same standardized simulation of common garden variety organizational problems facing managers regardless of the country in which they happen to be working. This section describes some of the cross-cultural research results we have obtained from these exercises and some of the communalities that seem to be emerging as a consequence.

The International Research Groups on Management (IRGOM) is the basis upon which we are able to develop and maintain a program of distributing exercises and from which we get back the research results. Each exercise must be good management training. If it isn't, it won't be used since the main purpose for its use is training. Research is a by-product of the activity. No director of an institute or management educator in his right mind is going to get in front of a group of managers for half a day with a poor excuse for a training effort and justify it to the managers as good research. All of our material must be tested in terms of its utility to training vehicles as well as to research. This means to some degree that this isn't the best possible research because we often have to compromise our data collection. We often have to minimize what we collect in the interest of maintaining a good training situation relative to the research situation. International Research Groups on Management is now composed of five networks. The earliest, the European Research Group on Management (ERGOM), is headquartered in Louvain, Belgium. We have a staff there of four professionals and several other workers who take care of running workshops to train trainers all over western Europe and a few other places, like the Congo and Israel. ERGOM is by far the most highly developed of our networks. There are over 300 management educators in Europe who are members of ERGOM and participate in one way or another in its program.

In Latin America we have CINSELA. We need three separate headquarters for Latin America because of geographical factors and also because we have found cooperation is easier between Americans in certain Latin American countries than among the Latins themselves. So we have three headquarters: one in Mexico, one in Columbia, and one in Brazil. In India our program headquarters is in Madras; and our most recent program has begun in Japan, headquartered in Tokyo. The fifth network, NARGOM (the North American Research Group on Management), has 100 members at this time.

To give you an idea of what a particular exercise is like, let me go into some detail with one exercise before launching into general discussion about research results based on other exercises.

Exercise Objectives is approximately a half day simulation. Each manager in a training effort (let's say we might have six or eight per group and four groups meeting in some kind of training program) gets a booklet which contains all the relevant materials. In the booklet he first sees a one-page case description of a medium-sized company of which he is a member of the management team. He gets a profit-and-loss statement indicating what the company's experience has been over the last ten years and also an indication that just this last year the company lost a little money. He now has to make five decisions by himself: whether or not to spend money on safety equipment, or hazard the likelihood that's indicated that there is about a 50-50 probability that some worker is going to get seriously injured on the job if he doesn't spend the money; recommend settling a labor dispute now or hazard the chance of a long strike; recommend putting money into a management development effort because certain members have been quitting; recommend or not recommend spending money to continue advertising a product

of low quality or put the money into a much more expensive research effort to improve the product quality; and finally whether or not to spend money to clean up the stream that has been polluted by the plant.

After the decisions are made by the individual managers, the small groups meet and try to reach group decisions as to whether or not to spend the money. The constraints on the managers are only that they know what their profit and loss statements look like, they know what their operating costs are like and what their sales estimates are like. The issues faced include the fact that we have just so much money, and we may not be able to afford all these things even if we wanted to. Following the small group discussion, the groups again look back at the decisions they've made and both as individuals and as groups decide on what objectives they had in mind when they made their decisions. Five objectives are laid out for which they can rank and distribute points, including satisfactory operations, growth, profits, employee welfare, and community good will.

Now what is learned by going through this process? What we see is learning occurring at several levels. First, there is learning at the individual level. The individual sees in the discussion that takes place that his values and his objectives are not necessarily shared as he might have expected with people he may have been working with for the last five years. For example, let's take the safety problem. One manager may say, "I just don't care. I just don't want to have the thought that a decision of mine was responsible for the death of an employee." The fellow sitting next to him may say, "Well, you can't hope to bankrupt the company because there's a hazard in the situation. It's the worker's responsibility. He knows what he's getting into. In fact, the job security of a thousand men may be at

stake in the situation if we overspend for correcting this particular hazard." The third man takes this to a little bit higher level. He looks at it and says, "Let's consider the impact on employee morale if employees know that there is a hazard and we haven't done anything about it." The fourth man comes in and he says, "Look, I'll show you how to make money by spending money here." In other words, I think (this is my own personal opinion) the fourth man represents the optimum in managerial thinking. He looks at it and says, "Let's consider what the effect on our insurance rates will be if we do not spend the money versus if we do spend the money. That is, if we do have a serious accident, what the overall effect on our insurance will be. Secondly, we look at the effect on employee morale. Thirdly, what will the actual cost to us be if we can amortize the thing over five years by borrowing the money..." What he does is integrate all the issues of the problem--taking into account many objectives, many factors operating within the situation to come up with a decision.

One can see the different variations in one's colleagues; for example, if this happens to be a workshop in which one is with other men who have been working together in the past. One gets an idea of the variations possible. Secondly, one can see how one reacts to these problems compared with other men in the whole workshop. For example, if there are 30 men in the workshop, the instructor, by picking up the NCR paper and having a clerk tabulate it, can put on the blackboard what all 30 men thought about the issues.

There is also small group sharing across small groups as to what the appropriate approach is.

Since the trainer sends the material into us at our Central Data Bank, we have computer programs that immediately feed back to him norms for all

of his programs. We also can send him norms for his country as well as for various other countries. Of course, often in other countries the question is: How do American managers react? Often they'll turn to looking at what the norms are for American managers in the situation.

Trainers may also focus attention on how men from different companies responded to the same data, showing the differences in company norms. Men coming out of a department store environment may be very different from men coming out of a banking environment in coping with a particular exercise problem.

We have no control over which managers come into the training. There are men who, let's say, attend an institute in France for a three-month program; or they may be men who have been sent by their companies for each evening once a week to a program run by consultants in downtown Kansas City. Although we're dealing primarily with men of second level and higher, there is no particular reason that many of our exercises cannot be used at first level also. We also range upward conducting programs for top managements of international firms. Right now we are doing systematic studies of the impact of a man's level and organizational size in terms of responses to these sorts of issues.

To give you some idea of the cross-cultural research that comes through in this exercise that I have just described, I was interested to note that a popular textbook on principles of management just published this year[1] indicated that European executives are far more profit-oriented than

---

[1]Dale's Principles of Management (New York: McGraw-Hill, 1970).

Americans. I wonder if it was a typographical error, because our data clearly suggests the opposite. Far and away, Americans are quite atypical from the rest of the world. For example, with reference to profits and growth, Americans are far more concerned with this than are Europeans. On the other hand Europeans would be much more concerned with maintaining satisfactory operations. We see systematic differences of this sort which we find can be used in a variety of ways. I'll try to relate this to you somewhat later after we have gone through other examples of research results in a more systematic way.

Our regional networks run workshops to introduce the exercises to industrial educators, unitersity educators, institute directors and the like.

It's useful to point out that some behavior we have seen is universal, some is culturally bound and some economically bound. I will mention briefly some examples of universal behavior we have found (universal in the sense that we found the same thing in six or seven countries), some culturally bound variations, and finally some economically bound variations. Let's return for a moment to Exercise Objectives. There is considerable learning (particularly if the trainer so directs attention on this) to the group dynamics of the situation. The likelihood that the group dynamics are culturally bound is much greater than the individual kinds of responding that we have talked about so far. Finally, we seem to have found that some variables are particularly sensitive to economic aspects of national differences.

Table 1, which is taken from one of our technical reports, describes the productivity of managers of different nationalities working on their own

Table 1

Productivity of managers of different nationalities, their own plans and plans assigned to them by others

Number of managers	Nationality of managers	Productivity when operating	
		Own plan (self-developed)	Other plan (assigned)
78	Scandinavian	71.7	62.2
108	Dutch	86.7	62.5
78	Belgian	68.9	49.1
132	British	94.9	79.2
162	American	80.9	69.9
42	Indian	63.0	41.1
600	All	77.0	64.8

plans and plans assigned to them by others. These results come from Exercise Organization. In Exercise Organization the managers divide themselves up into two three-man teams. Each team develops a plan in approximately 40 minutes on how to order and merge some numbers. It's a simple task requiring coordinated effort. Each team now has developed itw own plan. Next they exchange plans so now each team has both the plan it developed itself as well as the plan developed by the other team. Then in a counter-balanced order half the teams start working on their own plans first and the other half start working on the other teams' plans. Then they work on the alternate plan. At the end--about a 20 minute production run on their own plan and a 20 minute production run on the other plans--activity stops and comparisons are made. Table 1 shows the comparisons.

Note that in all six national groups productivity is about 20% higher working on their own plan.

I recently published an article in the Journal of Applied Behavioral Science[2] which tries to indicate what are the implications for industry when you can't conceivably get everybody into all kinds of self-planning. That is, you have to have planning for others. What do you do about it? The whole issue is "When Planning for Others," the title of the article. We do pick up a lot of information, as shown in Table 2, about the subjective feelings that are involved in comparing your own and other plans. Again, as might be fairly obvious, people everywhere tend to be more satisfied with their own plans than with other plans. Of course, the notion is that this is so obvious. Well, if it is so obvious, why don't we do more self-planning in industry? I assure you we could launch a two or three hour discussion with managers on just this issue. This exercise kicks off the whole problem. Then finally we might end up with: "OK, look at your own job back in the company and consider to what extent you could increase the amount of self-planning going on in your own job situation now with your subordinates." These are the sorts of things that a good trainer can build into the activity.

We have one exercise called Exercise Attitudes in which trainees meeting sometime early in a program (the first or second day of a one-week program) indicate on a questionnaire their expectations about the practicality of the course they are in, their expectations about the quality of the

---

[2]"When planning for others," Journal of Applied Behavioral Science, 1970.

Table 2. Evaluation by managers of different nationalities of operating their own plans and plans assigned to them by others

Number and nationality of managers	(1) Which was better?	(2) Felt more responsibility for which?	(3) Which was more flexible?	(4) Which is harder to understand?	(5) Which made better man-power use?
	%	%	%	%	%
78 Scandinavian					
Own plan	61.4	53.0	30.1	18.2	66.0
Other plan	31.0*	10.6	29.1	30.4	18.2
108 Dutch					
Own plan	60.7	42.7	41.3	22.0	43.4
Other plan	29.5	9.9	21.6	42.1	10.2
78 Belgian					
Own plan	59.0	57.2	48.2	27.0	38.3
Other plan	29.7	22.0	31.2	49.6	24.7
132 British					
Own plan	61.4	43.9	33.3	10.5	40.4
Other plan	21.0	17.5	21.0	28.1	17.5
162 American					
Own plan	52.2	54.5	39.6	28.1	47.1
Other plan	30.8	10.3	22.4	29.8	20.9
42 Indian					
Own plan	79.4	64.7	51.5	23.5	66.7
Other plan	14.7	17.6	15.2	50.0	12.1
600 All					
Own plan	59.7	50.9	39.2	21.3	47.6
Other plan	27.1	13.8	23.4	35.7	17.7

*Does not add to 100%. Remaining respondents indicated there was no difference between plans.

instruction, their expectations about the interest value of the course, and so on. Then somewhere near the end of the program they can take another exercise called Exercise Evaluation. After they have gone through a series of steps of designing a plan to evaluate the course both freely and then as a computer might and having discovered that going back to the same problem a second time and thinking more like a computer has considerable utility, they re-evaluate the whole program using the same questionnaire that has been used earlier in the program. Instead of indicating what their expectations are about the quality of instruction, they now indicate their satisfaction with the instruction, the practicality of the course, and the interest of the course. Even though we check for acquiescence (we have both a positive item and a negative item to insure that we're not just getting a response set outcome) what we find typically (and it seems to be universal) is a correlation somewhere around .5 between expectation and satisfaction; that is, those who tend to base evaluations of training programs on what trainees feel about it at the end of the program are probably measuring personality more than the quality of the program. Optimists who come into a program will end up saying that it was a good program. Pessimists who come into a program are not so sure. The correlation is a sizable one. There obviously is considerable room for people shifting but we demonstrate this to the managers by actually having them make up a scatter plot as part of Exercise Evaluation where they actually go back and look at their expectations and plot it against their satisfactions. They can see this high correlation in a simple scatter plot. This is another universal variable.

Now going on to more culturally bound variables, Table 3 shows the extent to which subordinates, following three meetings to make decisions with

Table 3

Reported satisfaction of subordinates following meetings to make decisions with participative and directive supervisors

	Culture and nationality of managers	Percent of subordinates who were most satisfied in decision-making meetings with participative supervisors
		%
40	Dutch-Flemish	62.5
	19 Flemish	68.4
	21 Dutch	57.1
50	Latin	50.0
	9 Colombian	55.6
	13 Italian	53.8
	14 French Swiss	50.0
	14 Spanish	42.9
72	Anglo-American	45.8
	23 American	52.2
	49 British	42.9
36	Indian	41.7
30	Scandinavian	36.7
	18 Norwegian	38.9
	12 Danish	33.3
18	Greek	22.2
246	Total	45.9

three different supervisors in a role-playing situation, said that they would prefer to go back to the participative supervisor. This is Exercise Supervise. In Exercise Supervise each of six management trainees in a group blindly chooses one color. Depending on the color, he is then assigned to play the role of an authoritarian supervisor, a persuasive tell-and-sell type supervisor, or a participative supervisor. Or he plays the role of one

of three subordinates: a highly involved subordinate, a moderately involved subordinate, or one who is just completely disinterested. Each of the six trainees first makes a series of decisions on what traits are desired for top management, middle management, and lower management. Then each subordinate meets in turn with the three supervisors, again in a Latin square counter-balanced order so that they have all permutations and combinations. In meeting with the supervisor, the subordinate comes up with a final set of decisions about what characteristics and traits are required for top, middle, and lower management. What Table 3 shows you is the responses of the subordinate after they've had the experience and now are asked which one of these three supervisors would they like to return to. This is before the roles are announced. At this point people have some general ideas. Everybody knows that it's a role-playing situation, but quite often subordinates think that the three supervisors they are meeting with are playing the roles of top, middle, and lower management rather than authoritarian, persuasive, and participative. It's not at all clear to them that the managers are what they are. At any rate, here is the data. The most interesting thing is the grouping of these five countries. The Dutch and the Flemings group together, the British and the Americans group together, and the Latins group together. Another interesting item is that the preference for participative supervisors is by no means universal. If you take a look at the Greek for instance, you can see that they preferred more directive supervision on an extra chance basis. Chance would have been 33 percent.

Unfortunately these data that you have here in Table 3 have been expanded; and one of our problems is that every time we do an analysis, since we are adding about 1,500 cases a month to our cata bank, the analysis

is always outdated by the time we finish it. This was an early analysis. We now have about ten times as many cases in the bank as when this analysis was done.

In Table 4 you see the responses of the superiors. There were three superiors; they met with three different subordinates. Most of them do not completely perceive what variations are in the roles of the three subordinates. Here the culture phenomena is interesting--that it is possible to group by culture. Again the Anglos, English, and Americans hang together, the Latins are together; and the Dutch and Flemings are together. Incidently no fancy statistics were applied to this. This is strictly a logical grouping of mine. I first grouped them and then simply laid out the data and there they are. A statistical analysis might suggest more optimum groupings from a statistical point of view, but certainly not from a meaningful point of view. Note how the Greeks and Indians come out here. Over half of the Indian managers preferred a passive subordinate--the man who said when he met with them, "Anything goes boss. I don't care. Whatever you say is all right with me." Only 14 percent of British and Americans preferred such an apathetic subordinate. I don't think you need statistics to suggest that this is statistically significant. What I'm getting at is that the difference is so great in some of these variables that they speak for themselves.

In Exercise Communications the substance of the exercise is one-way versus two-way communication. Each sender meets with a receiver and an observer. Each has his own booklet and each sender transmits one way (that is, he does not permit any questions) a description about how six rectangles hang together in a diagram. Then he transmits the same

Table 4

Reported satisfaction of superiors following meetings to make decisions with involved and uninvolved subordinates

	Culture and nationality of managers	Percent of supervisors who were most satisfied in decision-making with uninvolved subordinates
		%
63	Anglo-American	14.3
44	British	13.6
19	American	15.8
46	Latin	21.7
12	Spanish	16.7
15	French Swiss	20.0
8	Colombian	25.0
11	Italian	27.3
39	Dutch-Flemish	28.2
21	Dutch	23.8
18	Flemish	33.3
23	Scandinavian	34.8
15	Norwegian	33.3
8	Danish	37.5
12	Greek	41.7
30	Indian	53.3
213	Total	27.7

information two ways, permitting questioning. As is well known, two-way communication takes longer but it's more accurate and more satisfying to most. If you look at the Indian data in Table 5 (the third column over in "percent preferring as senders"), 20 percent of the Indians' senders preferred not to get talked back to; whereas only 3 percent of the

Table 5. Attitudes and performance in one-way and two-way communication

	Belgium	Denmark	India	Italy	Norway	United Kingdom	United States	Total
Number of managers	47	30	34	47	88	36	31	313
Number of groups	5	5	6	7	18	4	6	51
Percent more satisfied*								
With 1-way communication	6.4	3.3	2.9	6.4	2.3	2.8	12.9	4.8
With 2-way communication	85.1	93.3	79.4	87.2	83.0	88.9	83.9	85.3
Percent more frustrated								
With 1-way communication	68.1	70.0	70.6	85.1	72.7	69.4	71.0	72.8
With 2-way communication	17.0	30.0	20.6	8.5	13.6	22.2	19.4	17.3
Percent preferring as sender								
With 1-way communication	6.4	10.0	20.6	6.4	3.4	13.9	6.5	8.3
With 2-way communication	87.2	83.3	79.4	91.5	95.5	86.1	93.5	89.5
Percent preferring as receiver								
With 1-way communication	2.1	10.0	11.8	0.0	1.1	8.3	0.0	3.8
With 2-way communication	95.7	90.0	88.2	95.7	97.7	91.7	100.0	94.9
Time required for								
1-way communication (minutes)	4.43	4.19	7.75	6.91	4.50	10.34	5.16	6.06
2-way communication (minutes)	6.51	9.95	17.63	8.98	8.54	13.51	7.79	9.86
Placement accuracy by								
1-way communication (of 11)	5.77	2.63	2.10	7.30	6.55	5.91	7.63	5.69
2-way communication (of 11)	9.09	5.67	4.18	10.72	10.12	10.61	10.50	9.02

*Percentages may not total 100; the remainders represent those expressing no difference in their attitude.

Norwegians preferred this one-way communication. Now one of the reasons the Indian data may have come out this way, you'll notice as you go down, is that it took two-way communication 17 minutes for the Indians. It is just a more painful process. In all fairness to the Indians, one thing we have to point out is that the language of business in India is English, but that is not usually the Indian's first language. Typically, his first language is one of 16 provincial languages which is not English. The last time Indian managers had talked about rectangles and corners and angles was in high school geometry. Ordinarily, our exercises are in the languages of the nationals that we're dealing with except for the Indians where we used English because it is the accepted national language for the business world. We find their performance low in two-way communication, getting only four out of eleven placements, whereas you'll notice all the other countries except for Denmark (and I don't understand what happened to the Danes) getting up at nine or ten out of eleven placements in two-way communication. Another interesting thing: notice the accuracy in certain countries with one-way communication; for example, Italy and the United States with seven each. One-way communication is suggested when there is a good code existing between the receivers and the senders; or another way of saying it is, if the receivers are fairly expert and the senders are fairly expert, then one-way may work quite well. Here again the trainer may begin a detailed examination of the situation in which one-way is preferred over two-way communication.

Table 6 shows a typical level of aspirations experiment cross-culturally. In Exercise Organization (the one where trios plan for themselves and trans-plan for the other group) trios are asked as part of their plan, like good

Table 6. Discrepancy between goals and achievement, economic indices and n achievement data

Country	Number of trios	Discrepancy (Exp.-Act.)	GNP/[a] cap.	GNP/[a] cap./ yr.%	%[a] Industri-alization	n Achievement[b] 1925 data	n Achievement[b] 1950 data
			U.S. $	%	%		
India	12	47.75	$ 92	0.5	1.1	N/A	2.71
Netherlands	46	31.50	1,667	3.1	15.1	0.29	1.48
Italy	26	30.19	1,182	4.3	14.7	N/A	1.33
Belgium	21	28.48	1,903	4.0	17.2	1.00	.43
Denmark	16	25.62	2,331	3.8	11.6	2.00	1.05
United States	32	25.28	3,842	3.5	12.4	1.90	2.24
Ireland	20	24.55	1,021	4.0	8.6	3.19	2.29
England	46	23.78	1,925	2.3	19.4	2.10	1.67
Correlation with discrepancy scores			-.66	-.75*	-.71*	-.89**	+.41

[a]From U.N. Statistical Yearbook 1967, United Nations, N.Y. 1968. While GNP/cap and GNP/cap/year were obtained directly from the Tables, % industrialization was computed as the proportion of the total population employed in the basic industries, i.e., mining, manufacturing, construction and energy.

[b]From McClelland (1961).

Two tailed tests: * $p < .05$

** $p < .01$

industrial engineers, to estimate what production is going to be like under their plan. You know from your own vast experience that overestimation is the rule and underestimation is the exception. Everybody overestimates, but you can see that there is a real systematic difference between the amount of overestimation of the Indians in comparison to the overestimation of the Europeans and the Americans. I would ignore all the other correlations. One of the problems of being a participative director of a management research center is that I can scream and shout and stamp and say don't you dare put that stuff in the table because it's idiotic, but the silly correlations below are run, displayed, and the report gets distributed. The correlation there is just not at all justified. I think the data clearly points to a real difference between the magic carpet thinking of the Indians in their overestimation relative to the overestimation in the western world, with reference to this exercise. Incidently, when I say Indian, I'm talking about South Indians; and from some little data and experience I've had in Bombay and Calcutta these results would probably not be duplicated with Indian managers from the more developed parts of India, like Calcutta and Bombay. The south is far more traditional. The men in the north tend to be similar to westerners in many respects. This, by the way, again is a complication of our whole research effort; namely, sometimes there may be more variation within regions of a country than between countries.

The next one is Table 7 and it's headed "Mean Ranks of Life Goals Assigned to Self." Exercise Life Goals provides each manager with eleven life goals. Like many of our other exercises, this is an exercise that has been internationalized. I originally wrote the exercise, but based on

Table 7. Mean ranks of life goals assigned to self

Rank	United States		United Kingdom		Denmark	
1	Leadership	4.15	Self-real.	4.23	Service	4.53
2	Self-real.	4.27	Security	4.55	Expertness	4.66
3	Independ.	5.76	Leadership	4.98	Self-real.	4.83
4	Security	5.80	Pleasure	5.14	Independ.	4.93
5	Expertness	6.02	Independ.	5.20	Security	5.00
6	Wealth	6.12	Expertness	5.42	Affection	5.47
7	Affection	6.14	Affection	5.74	Pleasure	5.61
8	Pleasure	6.51	Service	6.30	Leadership	6.00
9	Service	6.73	Wealth	7.60	Duty	7.32
10	Prestige	7.10	Prestige	8.16	Wealth	8.80
11	Duty	7.44	Duty	8.59	Prestige	8.85
		59		86		59

Norway		Italy		Spain		India	
Self-real.	3.57	Self-real.	3.75	Self-real.	2.79	Expertness	4.3
Affection	3.80	Independ.	4.19	Service	4.45	Self-real.	5.0
Independ.	4.02	Affection	4.60	Leadership	5.04	Service	5.28
Security	5.11	Leadership	4.82	Affection	5.10	Duty	5.45
Leadership	6.02	Security	5.23	Security	5.74	Leadership	5.59
Pleasure	6.04	Expertness	6.14	Expertness	5.83	Independ.	5.64
Duty	6.33	Pleasure	6.75	Duty	6.03	Affection	5.91
Service	6.33	Service	7.02	Independ.	6.37	Prestige	6.26
Expertness	7.39	Prestige	7.11	Prestige	6.88	Security	6.90
Wealth	8.52	Duty	7.28	Wealth	8.86	Wealth	7.09
Prestige	8.87	Wealth	9.11	Pleasure	8.90	Pleasure	8.55
	54		57		78		69

meetings with translators and social scientists in Europe who were involved in the start of the work in this project, we ended up with an expanded list. Specifically added were two of the eleven goals--duty and pleasure.

Each of these eleven goals is defined for the manager in his booklet. Then each manager ranks the importance of the eleven goals to himself and to everybody else (each other person in his own small group with whom he has been meeting). This is an exercise which requires some previous experience with the other people in the group--either with a one- or two-day experience where you're dealing with first impressions, or with people who have been working together for longer periods of time. Our own evidence is managers tend to say they never have enough information about other managers even if they have been working together for 20 years. By the way, sometimes you can learn more about another fellow you've been working with back in the shop for 20 years in a one-week workshop. But be that as it may, you then have data on how each manager ranks eleven life goals in importance to himself and his estimation of what each of the other people in the group are like. It can be seen again in our data that the United States is unique. If I can really make some giant leaps, this suggests our number one hangup--why we can't get ourselves out of some tough situations that we have gotten ourselves into in Southeast Asia. Leadership is number onf for Americans. Leadership here is defined as being influential in one's community and in one's company. Of the countries surveyed there is no other country where leadership ranks as high. Among the British it becomes third.

Let me call your attention to another goal. I like to play this game with people who are interested in cross-cultural activities or have traveled a lot. I say to them: If you consider all the countries of western Europe,

in which country would interest in having fun, having a good time, and pleasure be far and away much higher than anywhere else in Europe? Anybody with the old European sterotypes would never guess the right answer, which as you see here is the United Kingdom. The British are in a class by themselves. They rank pleasure fourth where as no other country puts it above sixth. True to sterotype the Spanish and the Indians put it down to eleventh. So much for the Protestant Ethic. What has happened of course is, as far as the United Kingdom is concerned, one can't talk about Protestant Ethics. One has to talk about the Cavalier's Ethics.

Notice the remarkable difference between Americans and Danes. Americans put service--to be of help, to be of assistance, to do good things, etc.--as ninth out of eleven. The Danes put it up as number one. Some management theorists would argue that all this cross-cultural stuff is nonsense and there is just one best way--the American way, although they tactily assume this. I'm suggesting that if you are an American manager and have to be doing business in Denmark or have relations in systematic ways with activities dealing with many things, you would be well advised to keep in mind that there are rather systematic variations and differences between how Danes see what is important to themselves and how Americans see what is important to themselves in the aggregate. Obviously we're only talking about averages, means, tendencies, and norms. We're not talking about individuals. The individual variation from the norm is likely to be very great. We certainly have service-oriented Americans.

Affection is concern about family matters, concern for having warm friends and family relations. Notice that the Italians put it at third as you might expect. It becomes less important in most other countries. It is

high in Norway.

We also have life goals data on how people estimate what everybody else in the group is like. Let's take a look at Spain. Here, prestige is only number nine for "me", but guess what it is for the guy sitting next to me--number three. The tendency for Americans is to say: "I don't want to be the expert; it's the fellow next to me who wants to be an expert." However, Americans are accurate about leadership. They see that other Americans want leadership too.

Another characteristic we have found in contrasting Americans with Europeans--there is a much higher degree of competitiveness among Americans than among Europeans. However, if I want to be influential and I know you want to be influential, and I'm right and you're right, we're more likely to be in competition than if I think you're concerned about service and I'm concerned with self-realization. Note, by the way, that self-realization comes up pretty strongly in all countries. That is universal across the board, which fits in the same sort of thing Haire, Porter, and Ghiselli came out with.

In the same exercise each manager scores for himself how accurate he was. People share with each other what their life goals actually are, and there's a place for tabulation and a simple scoring procedure. Each man gets a measure of how accurate he was, how much he assumed himself to be similar to others, to what extent his own ratings were simply given to other people, to what extent he was an open book (that is, other people were very accurate about him), to what extent other people project onto him (he was sort of a central figure for the group), and so on. We've done a systematic analysis of these data.

I would now like to turn to some variations that seem to be attributed to economic development. If you turn to Table 8 which summarizes some of our results with Exercise Compensation, you can see that we have some systematic differences between the United States and Scandinavia on one hand and India and Columbia on another. In this particular exercise ten engineers are described to the individual manager. Each engineer has some particular characteristic--he's say in the tenth percentile in merit or he's in the nintieth percentile in merit or he's just fiftieth percentile in merit or he's fiftieth percentile in merit but he has a family problem or he's fiftieth percentile in merit and he has a better job offer elsewhere and has come in and indicated he may quit if he doesn't get a salary increase and so on. The problem for the individual manager is to recommend an appropriate percentage salary increase. The small groups then meet and do the same. We just stumbled into the results we see here. First off we found a pretty remarkable uniformity on the average across countries in what percentage increase is recommended to the man who is described as in the nintieth percentile. It's approximately 1 1/2 or 1.6 times as much as the average man who is at the fiftieth percentile. At first our hypothesis was the extra money that's given to the good man is taken away from the poor guy and so he, the poor man, will only get a fifty percent increase relative to the best man. In fact, it turned out quite differently. As you see in the United States and Scandinavia, the poor man in merit gets about seventy percent of what the average man gets (on the second column--poor versus average). In Scandinavia he gets seventy percent of .68 of what the good average man gets, but notice what happens when we go into developing countries like India and Columbia. There's a jump. The ratio then between

Table 8

The influence of performance on relative salary increases

Country	Best: Average	Poorest: Average	Best: Poorest
U.S. (N=38)	1.57	.68	2.38
Scandinavia (N=20)	1.64	.68	2.41
India (N=32)	1.49	1.10	1.35
Columbia (N=24)	1.63	.93	1.59
Developed (U.S.-Scandinavia) vs. Developing (I-C)		**	**
Developed (U.S. vs. Scandinavia)			
Developing (I vs. C)			*

* $p \leq .05$ (two-tailed test)

** $p \leq .01$ (two-tailed test)

what is given to the best man--the man in the nintieth percentile--and to the man in the tenth percentile. For the United States it's 2.38; for the Scandinavians it's 2.41 similar. It is again very different for India and Columbia--1.35 and 1.59 respectively. We have a hypothesis here that in developing countries money, or paid compensation, is looked at quite differently than in the developed countries. In the developed countries, particularly in the United States, we find that there is only one rationale really for pay increases and that is merit. Everything else is secondary and I'll show you evidence of this in a minute. The developed countries say

if a guy's been good, he's been meritorious; give him his reward. You reward people for meritorious performance. The developing countries have the notion (maybe this is pure spectulation on our part) that if the fellow's doing badly, he's poor, let's try to motivate him by giving him more money. So that money is used as a motivator instead of a reward. As I say, it's strictly a hypothesis at this point.

I mentioned that there were ten different engineers--only two of them vary from the average in merit. The rest of them had family problems, dirty jobs, unpleasant working conditions, and the like. What we find is that Americans and Scandinavians were more likely to just say that there is no particular rationale for giving men with problems anything different than you give to the other guys who are average in merit. On Table 9 only 54 percent of the American sample gave American engineers the same as the average man; whereas in India and Columbia, there was much more exception. Only 27 percent gave just the average (they gave them more or less) to a fellow who said he was in an insecure job or he had co-workers whom he didn't like. Another way of showing this--the flatness of the American attitude toward these other factors--is by standard deviation in the assignment of the seven increases to the seven who have these special problems such as insecurity and threatening to quit. The standard deviation is only .86 among the seven for Americans where as it goes up to 1.25 for Scandinavia, 1.86 for India, and 2.60 for Columbia. There is much more willingness to give differential salary increases for these special problems and issues.

At first I thought we had a really interesting finding that pinned down what might be called the Anglo-Saxon culture. Jim, one of the engineers, is threatening to quit. What we had found as the American attitude on our

Table 9

Discriminations in relative salary increments awarded to engineers in different job conditions

	U.S. (N=38)	Scandinavia (N=20)	India (N=32)	Columbia (N=24)	Developed vs. developing (U.S.-Scand) vs. (I-C)	Developed (U.S.) vs. (Scand)	Developing (I) vs. (C)
% of times engineers were given the same as A1	54%	58%	27%	36%	*		
Standard deviation of salary increments	.86	1.25	1.86	2.60	***		*

The higher the %, the more often salary increments offered to engineers in the 7 special job conditions were identical to A1's.

The higher the standard deviation the more salary increments varied between different job conditions.

* $p \leq .05$ (two-tailed test)

*** $p \leq .001$ (two-tailed test)

early data collection was that he received less of a salary increase than all the other engineers (or at least less than the average given to the others) for coming in and telling the boss he had a better job offer elsewhere. We got the same result in Britain. After getting the same result in Dublin, I said that this is an Anglo-Saxon phenomenon. It was the wrong place to say it, but it was true that the Irish managers tended to react the same way as the British and American managers with reference to this issue; whereas in the rest of the world, there is a tendency to give this fellow a sizable increase. On continental Europe, as well as India and Latin America, the man that comes and says, "Boss, somebody else is trying to give me a better job offer," is likely to get more of a response out of his superiors. We need more data before we can be sure this is an accurate phenomenon.

Let me turn to one final set of results that I've got tabulated here. Exercise Negotiations is a simulation of a labor management dispute under negotiation. Each of two groups of managers takes the role of either a union or of management. A strike is just started; they are given a case description of the community payscale, the community handling of the five different issues that are under dispute; and they are told something about the background of the company and the union. Each group takes about an hour to plan its strategy for the management group and those that take the union side. Then each manager goes out and bargains with a counterpart from the other group. Fifty minutes represents $50,000 in cost. One is directed to try and reach an agreement as soon as possible. The sooner one reaches an agreement, the less the cost of the negotiations. So you see, the total cost of the negotiations (Table 10) was $25,000 meaning the average time it took for the negotiations was 25 minutes. Notice it took 35 minutes in the

Table 10. Results of the negotiation

Issue	Mean of possible settlement	Mean of actual settlement			Percent of total package		
		United States	United Kingdom	Test of significance	United States	United Kingdom	Test of significance
Number of pairs		27	59		27	59	
1. Health plan	$ 9,000	$10,222	$ 8,276	*	15.2	13.0	++
2. Wages	36,000	37,630	32,690	*	56.0	51.2	++
3. Sliding pay scale	10,000	14,074	17,586	*	20.9	27.6	++
4. Night shift differential	2,500	3,481	3,810		5.2	6.0	
5. Vacation pay	2,500	1,852	1,405		2.8	2.2	
a. Total settlement (1-5)	60,000	67,259	63,767		100.0	100.0	
b. Total cost of negotiation	25,000	35,593	23,103	**			
c. Cost to company (a+b)	85,000	102,852	83,466	**			
d. Gain to union (a-b)	35,000	31,667	37,259				

* Statistically significant difference of means at $\alpha = 0.05$ level.

** Statistically significant difference of menas at $\alpha = 0.01$ level.

*** Statistically significant difference of proportions at $\alpha = 0.01$ level.

United States--again illustrative of our more competitive attitude towards things--and only 23 minutes for the British to settle the same problem, same issue, same negotiation. If negotiations go on for 50 minutes, then there is a deadlock and a penalty of $100,000 is attached.

The dynamics in the situation are this: Some managers having been in on the strategy planning of their groups go out and bargain quite inflexibly; they're very much tied to their groups. Others tend to say, "Well, my group thinks this; but I'm still pretty much a free agent and I'm going to go out and get the best possible settlement." We see cross-cultural differences in commitment. We find that for one sample of Spaniards, it took only 18 minutes to settle. So the groups had a strategy; so what does that mean for good individualistic Spaniards. They are their own bosses, and they can settle things quite easily. Contrary to some sterotypes, Spaniards prize individualism far more highly than, let's say, Americans. Pick the reverse--Japan. We had a much longer time to settle among the Japanese. We had four deadlocks in one particular study when we should expect about one deadlock per every ten sets of negotiations. Even though each Japanese was out negotiating with one other counterpart from another group, the uniformity of settlement was phenomenal; that is, they almost all settled close to the same point. We got much more variation among the Spaniards or among the Americans and the British, but let's return to Table 10--the British data. The five bargaining issues are health plan, wages, sliding pay scale, night shift differential, and vacation pay. In Britain there was a willingness among the participants to put more money into sliding pay scales, and in the United States a little bit more money was put into wages. The American settlement cost

more and that may explain why it took longer. The American union men, the men playing a union role, were pushing for more bucks and caused time to go on a little bit longer. Possibly more interesting is to look at the subjective responses of the managers when they're asked to fill out a questionnaire in the booklet on what their strategies were. Let me call your attention to the difference between the United States and the United Kingdom on Item b (Table 11), Initial Bargaining Approach. Notice that the British are much more inclined to start with the most important issue, 33.9 percent compared to 20 percent of the Americans starting with the most important issues. The Americans are more likely to start by trying to find out what the opponent's goals are. Americans are more personally oriented. For one reason or another you sense that Americans have become much more concerned about individual dynamics, about the process that's going on, rather than just the substance of content. It may be that they've actually been affected to some degree by all the psychological emphasis that's been placed on management education and training in the last 15 years.

Well, let me just conclude with a few other examples of results supporting what I've presented already. In Exercise Fishbowl one group reviews it's performance to date in front of, or surrounded by, a second group which observes the first group. Then the observers feed back to the target group their opinions about the performance of the group they've just been looking at--the processes that have been going on. Places are changed and the procedure is repeated so each group has a chance to serve as a consultant to the other group. What we see in the measurements is, generally, that each group thinks it's better than the other group; we are better than they are. We, as consultants, think you did a relatively poor job.

Table 11

Differences in strategy plan

	Sample N	U.K. 118	U.S. 54	Significant difference level, α =
		%	%	
a.	Approach Best Describing Strategy (percentage distribution)			
	Package deal	65.3	55.6	--
	Trading off items	16.9	33.3	.05
	One issue at a time	.8	5.6	--
	Setting maximum and minimum limits for negotiating each issue	14.4	3.7	.05
	Other	2.6	1.8	--
b.	Initial Bargaining Approach (percentage distribution)			
	Start with most important issue	33.9	20.4	--
	Start with an unimportant issue	15.3	14.8	--
	Start by trying to find out opponents' goals	42.4	61.1	.05
	Other	8.4	3.7	--
c.	Difference of Actual Strategy from Planned one (Mean) (1 = exactly the same; 9 = completely different)	3.46	3.21	--
d.	Degree of Commitment to Pre-bargaining Strategy Plan (Mean) (1 = not at all committed; 9 = completely committed)	6.79	6.72	--

Looking at the issue cross-culturally, Americans seem to be more so in this we-they feeling--this sense of competitiveness--than are, for example, Europeans.

We have one exercise called "Kolomon" which makes it possible to get at measures of a willingness to risk. You have seven decisions to make. With each one you can opt for a long term-high risk option or you can opt for a low payoff with less risk. Americans and Japanese so far seem to be pretty similar in their willingness to risk, pretty pragmatic, relative to South Indians who are much more likely to go in the direction of high risks and more idealistic kinds of options.

We have a number of newer exercises, and we continue to develop new exercises in this program. When I say we, now, I mean other people are developing new exercises. Our latest one, developed by the president of a fairly sizable firm along with several other people in our center--is called Exercise Venture, and it's a problem in deciding on a portfolio of investments for a company to expand its growth in a systematic and sensible way.

Exercise Future gives each manager a chance to look at, by means of a questionnaire, what he expects to happen on his job in the next five years, what he'd like to see happen on his job in the next five years, what he regards as important, and what he thinks he has control over. Then he's told to look back on those items he feels are a big discrepancy between what he wants and what he thinks is going to happen but he's got control over it and it's important to him. And we say, "If that's so, what are you going to do about it?" In part of the exercise, he develops an action plan which he checks out for feasibility with colleagues. We think we're going to get

some real wide variations across countries. We've already got nice differences across organizations. We're doing an experiment now testing the impact of this exercise on management development; that is, to what extent going through this exercise does, in fact, nine months later produce significant increases in managers' tendencies to get involved in various kinds of change and changes in their own training effort and their own style of activity.

Finally we have a self-appraisal exercise in which people appraise their own managerial style, interpersonal style, and learning style. They have a chance to get feedback on this. Also we have an exercise dealing with organizational success--what it takes to be successful. We already have some cross-cultural data on this, but I don't have much in the latest revision of our exercise to make it possible to report it here.

To sum up, we have an on-going operation which once was funded by the Ford Foundation but now tends to be partly self-supporting through the sale of materials and the running of workshops. We have a network which has made possible the introduction of semi-participative, structured-educational materials into many countries where such participative education was almost totally unknown. By the way, we think that one of the reasons we're successful in some other countries is that the full participative approach that is so common today in the United States--let's say, sensitivity training--is still harder to introduce into traditional countries, where something in between which has some of the characteristics of participation, such as these exercises or similar kinds of structured activities, can be introduced sometimes somewhat easier. We keep revising these training materials based on feedback from the field as to what's good about them and

bad about them. We also have a chance to test many cross-cultural hypotheses and keep building and retesting and replicating studies given. All we need is time for the data to keep coming in, which now runs about 15 hundred cases a month. We see ourselves continuing to go into some new countries. I expect, for example, to open up activities with a workshop in the Philippines and in Australia this summer which will represent new departures for us.